Access DB# 44171

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Arthur Marschel Examiner #: 67345 Date: 6-12-01
Art Unit: 1631 Phone Number 308-3894 Serial Number: 08/973,381
Mail Box and Bldg/Room Location: CM1/12A11 Results Format Preferred (circle): PAPER/DISK/E-MAIL
(12D04)

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

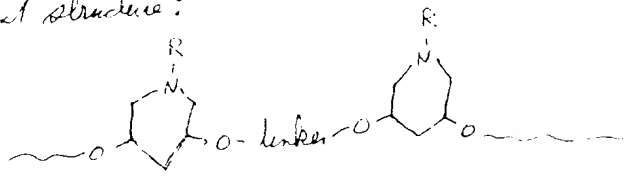
Title of Invention: Aminodiol oligomers

Inventors (please provide full names): Normand Hebert

Earliest Priority Filing Date: 6/7/96

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search for polymers containing the following chemical structure:



R = any substituent or H; preferably either a nucleobase or amino acid side chain

linker = any chemical linkage, preferably a phosphate or phosphodiester linkage

Point of Contact:
Susan Hanley
Technical Info. Specialist
CM1 12C14 Tel: 305-4053

****

STAFF USE ONLY

Searcher: Hanley
Searcher Phone #:
Searcher Location:
Date Searcher Picked Up: 6/12
Date Completed: 7/5
Searcher Prep & Review Time:
Clerical Prep Time:
Online Time:

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#) 1
Bibliographic
Litigation
Fulltext
Patent Family
Other

Vendors and cost where applicable

STN
Dialog
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet
Other (specify)

PTO-1590 (1-2000)

inventor's work

MARCHEL ... 7/1/01

... 11

... COPYRIGHT ... ACS
... combinatorial
...
Herbert Normand
... Palisad..., CA, ...
... Macromolecules (Wash... Wash. Disc. Chem. Soc.), ... (...), ...-...
... Publisher: American Chemical
... Washington, D. C.
... CODEN: ...
... Journal
English
AB A ... methods in strategy for prepg. combinatorial libraries of
... polymer photoinitiators in solid support.

... 1ed
... CLAIMS SINCE FILE TOTAL
ENTRY SESSION
...ESTIMATED COST ... ...

... AMOUNT FOR QUALIFYING ACCOUNTS SINCE FILE TOTAL
ENTRY SESSION
... SUBSCRIBER PRICE ... ...

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STRUCTURE FILE UPDATES: ... JUL 2001 HIGHEST RN 344549-03-1
DICTIONARY FILE UPDATES: ... JUL 2001 HIGHEST RN 344549-03-1

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

Please note that search-term pricing does apply when
... SmartSELECT searches.

... structure search limits have been increased. See HELP CLIMIT
... details.

... ES AND PMS/CI
... ES
... MS/CI
... ES AND PMS/CI

... AND ...
... /ELS
... L3 AND ...

... STAN

... ANSWERS REGISTRY COPYRIGHT 2001 ACS
... ...-hexyl-2,5-phenylenediyl-1,2-ethenediyl-2,5-naphthalenediyl-2,6-...
... 2-methylhexyl-9,10-anthracenediyl-2,6-naphthalenediyl-1,2-...
...ethenediyl ...CI
(C65 H71 N O2)n
PMS

[illegible]

[illegible] ANSWER [illegible] OF 4 HCAPLUS COPYRIGHT [illegible] ACS
[illegible] HCAPLUS
[illegible]
Combinatorial libraries [illegible] aminodiol
[illegible]
[illegible]
[illegible] Pharmaceuticals, Inc., USA
[illegible], Cont.-in-part of U.S. Ser. No. [illegible]
CODEN: [illegible]
DT Patent
LA English
FAN.CNT [illegible]

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	[illegible]	B1	[illegible]	US [illegible]	[illegible]
	CA [illegible]	AA	[illegible]	CA [illegible]	[illegible]
	WO [illegible]	A1	[illegible]	WO [illegible]-US[illegible]	[illegible]

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, [illegible], DE, [illegible], EE, [illegible], FI, [illegible], GE, [illegible], IL, IS, JP, KE, KG, [illegible], KR, [illegible], LK, [illegible], [illegible], [illegible], [illegible], [illegible], MD, MG, MK, MN, MW, MX, [illegible], NZ, PL, [illegible], [illegible], [illegible], [illegible], [illegible], SG
RW: [illegible], [illegible], [illegible], [illegible], [illegible], [illegible], AT, BE, CH, [illegible], [illegible], [illegible], [illegible], FR, [illegible], [illegible], [illegible], IT, [illegible], [illegible], NL, PT, SE, BF, [illegible], [illegible], [illegible], [illegible], [illegible], GA

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	AU [illegible]	A1	[illegible]	AU [illegible]	[illegible]
	JP [illegible]	T2	[illegible]	JP [illegible]	[illegible]
	EP [illegible]	A1	[illegible]	EP [illegible]	[illegible]

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, [illegible], [illegible], NL, SE, [illegible], PT, IE, FI

PRAI US 1994-[illegible] A2 19940111
US 1995-[illegible] A 19950607
WO [illegible] W [illegible]

AB **Combinatorial libraries** are constructed to include **aminodiol** monomer subunits connected by phosphodiester, phosphorothioate, or phosphoramidate linking moieties. **Combinatorial libraries** of the invention feature a plurality of functional groups attached to backbone and phosphoramidate **combinatorial** sites.

IT **51-35-4** **65-71-4**, Thymine **71-30-7**, Cytosine **73-24-5**, Adenine, reactions **98-88-4**, Benzoyl chloride **103-82-2**, Phenylacetic acid, reactions **107-95-9**, [illegible]-Aminopropionic acid **112-47-0**, 1,10-Decanediol **288-32-4**, Imidazole, reactions **534-03-2**, 2-Amino-1,3-propanediol **28920-43-6** **40615-36-9**
RL: RCT (Reactant)
(**combinatorial libraries** having **aminodiol** monomer subunits)

RN [illegible] HCAPLUS
CN L-Proline, 4-hydroxy-, (4R)- [illegible] (CA INDEX NAME)

Absolute stereochemistry.

RN [illegible] HCAPLUS
CN [illegible] -Pyrimidinedione, [illegible]-methyl- [illegible] (CA INDEX NAME)

... HUBBARD
... ethanol, 2-[bis(4-methoxyphenyl phenylmethoxy]- ...OI ... IA INDEX NAME

... Me

... HUBBARD
... Butanedioic acid, mono[2-[bis(4-methoxyphenyl phenylmethoxy]ethyl] ester
...OI ... IA INDEX NAME

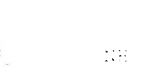
... Me

... HUBBARD
... 1-Pyrrolidinol, 3-[bis(4-methoxyphenyl phenylmethoxy]methyl]-, (3R,5S)-
...OI ... IA INDEX NAME

... lute stereochemistry.

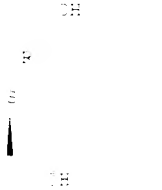
... Me

... HUBBARD
... ...ethanol, 2,2-bis-(4-hydroxy)-3-hydroxymethyl-4-hydroxy-4-(4-chloro)-4-hydroxy-
...-4-... ...OI ... IA INDEX NAME



RN [illegible] HCAPLUS
CN L-Prolinedicarboxylic acid, 4-hydroxy-2- hydroxymethyl -, 9H-fluoren-9-ylmethyl ester, [2S,4R - [9CI] (CA INDEX NAME

Absolute stereochemistry.



RN [illegible] HCAPLUS
CN L-Prolinedicarboxylic acid, 2-[bis 4-methoxyphenyl phenylmethoxy]methyl -4-hydroxy-, 9H-fluoren-9-ylmethyl ester, [2S,4R - [9CI] (CA INDEX NAME

Abs [illegible] stereochemistry.

... Me

... HCAPLUS
... ... bis 4-methoxyphenyl phenylmethoxy ... ester
... CA INDEX NAME

... Me

... HCAPLUS
... ... bis 4-methoxyphenyl phenylmethoxy ...
... CA INDEX NAME

... Me

... HCAPLUS
... ... bis 4-methoxyphenyl phenylmethoxy methyl ...
... CA INDEX NAME

BIBLIOGRAPHY

1. ALLEN, W. H., 1974, 1975, HOARDUS
2. ALLEN, W. H., 1933, 1941, HOARDUS
3. ALLEN, W. H., 1980, 1981, HOARDUS
4. ALLEN, W. H., 1980, 1981, HOARDUS
5. ALLEN, W. H., 1980, 1981, HOARDUS

ALL CITATIONS AVAILABLE IN THE BE FORMAT

[illegible]

[illegible] COPYRIGHT 2007 ACS

[illegible]

[illegible]

[illegible]

[illegible] Part 22. Diformylbenzo-15-crown-5-
[illegible] Ni(II) Complexes and Template-Directed Synthesis of
combinatorial Virtual **Libraries**

[illegible], Alexander; [illegible], Istvan; Fulop, Ferenc

[illegible] Department of Chemistry, Raymond and Beverly Sackler Faculty of Exact
[illegible], Tel-Aviv University, Tel-Aviv, 69978, Israel

[illegible], Chem., Int. Ed., 2007, [illegible]

[illegible] (CD-ROM); (IEFS); ISSN: [illegible]

[illegible] Verlag GmbH

[illegible]

[illegible]

Reaction of 2-OHCC6H4OCH2CH2OC6H4CHO-2 with 1-1,4-diamino-2,3-butanediol and 1-2,3-diamino-1,4-butanediol gave macrocycles I and II, resp., in [illegible] yield. I existed in DMSO without its Schiff base ring-opened tautomers, even on heating, although heating in DMSO-d6 produced these tautomers. The analogous tautomers of II could not be produced. The effects of chelation on ring-chain tautomerism of II showed that Ni II , Cu II , and Pb II are complexed by different tautomeric forms, depending on the size of the cation. Condensation of 1,10-phenanthroline-2,9-dicarboxaldehyde with the above **diaminodiols** gave 1:1 macrocycles, which formed partly unbiased, isoenergetic dynamic **combinatorial libraries** over a wide temp. range.

IT 14280-50-3, Lead 2+ , reactions 14701-22-5, Nickel 2+ , reactions 22537-48-0, Cadmium 2+ , reactions 52118-10-2 57709-62-3, 1,10-Phenanthroline-2,9-dicarboxaldehyde 104769-25-7 302799-62-8

RL: RCT (Reactant)

diformylbenzodiazadecalin salen tautomeric macrocycles and complexes and prototypical dynamic **combinatorial** virtual **libraries**

[illegible] HCAPLUS

[illegible] Lead, ion (Pb2+) 6CI, 8CI CA INDEX NAME

[illegible]

[illegible] HCAPLUS

[illegible], ion (Ni2+) 6CI, 8CI CA INDEX NAME

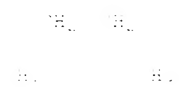
[illegible]

[illegible] HCAPLUS

[illegible], ion (Cd2+) 6CI, 8CI CA INDEX NAME

[illegible]

RN [illegible] HCAPLUS
CN [illegible] CA INDEX NAME



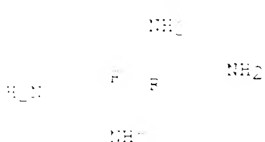
RN [illegible] HCAPLUS
CN [illegible]-Phenanthroline-[illegible]-dicarboxaldehyde [illegible] CA INDEX NAME

RN [illegible] HCAPLUS
CN [illegible]-Butanediol, 1,4-diamino-, (2S,3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN [illegible] HCAPLUS
CN 1,2,3,4-Butanetetramine, (2R,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



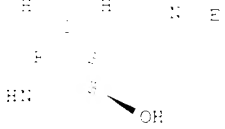
IT **302799-63-9P 302799-64-0P 302799-66-2P**
302799-68-4P 302799-69-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(dioxadiazadecalin/salen tautomeric macrocycles and complexes and prototypical dynamic **combinatorial** virtual **libraries**)

RN [illegible] HCAPLUS
CN [illegible] [1,4,8,13]dioxadiazacyclohexadecine-[illegible]-dimethanol, [illegible]-hexahydro-, [illegible] (CA INDEX NAME)

Absolute stereochemistry.
[illegible] geometry as described by E or Z.

AN - - -Dec-2 HCAPLUS
TI - ,,-Epoxybis(methano)-,3',[1,4,5,7,9,11]dioxadiazacyclohexadecin-,-(2,
,,,7,8,9,10,12,13,14,15,16-tetradecahydro-, SR,8S,9S,11E - PII DA INDEX NAME

Absolute stereochemistry.
Double bond geometry as shown.

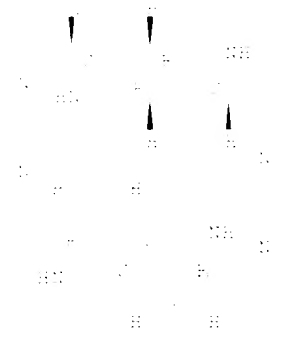


AN - 2001:799-xx-2 HCAPLUS
TI - ,,,,,,-Diepoxydibenzo[e,l][1,4,8,11]dioxadiazacyclohexadecine,
,,,7,8,9,10,12,13,14,15,16-decahydro-, 5R,8S,9S,10R - PII DA INDEX
NAME

Absolute stereochemistry.

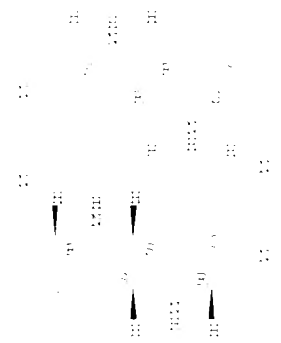
AN - [illegible] HCAPLUS
TI - ,,,,,,,,,,-Tetraepoxy-1,3:14,17:18,21-tetra,,,-
[illegible]dioxadiazacyclo[illegible]
,,,,,,,,,,,,,,,,,,,,,,,,-hexadecahydro-,
SR,10S,11S,14R,15S,18R,19R - PCI DA INDEX NAME

Absolute stereochemistry.



RN [illegible] HCAPLUS
CN [illegible]tetraethyl-7,[illegible]14:[illegible]7,[illegible]-
[illegible]tetraimino[1]benzo[e,s][illegible]tetraazacyclo[illegible]
[illegible]dodecahydro-,
[illegible]

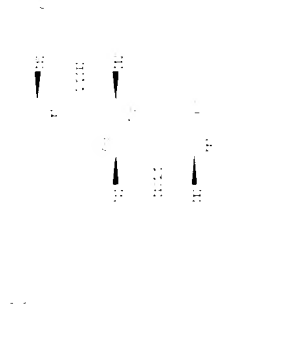
Absolute stereochemistry.



II 302799-67-3P
ALL: JPN Synthetic preparation; PREP (Preparation
dibenzodiazacyclohexadecahexaimine salen tautomeric macrocycles and complexes and
their biomimetic dynamic **combinatorial** virtual **libraries**

RN [illegible]-67-3 HCAPLUS
CN 5H,12H-Dibenzo[e,o][1,4,8,13]tetraoxacyclohexadecin-5,9:6,12-diimine,
7,8,9,10,13,14-hexahydro-, (5R,6S,9S,12R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT [illegible]
RE

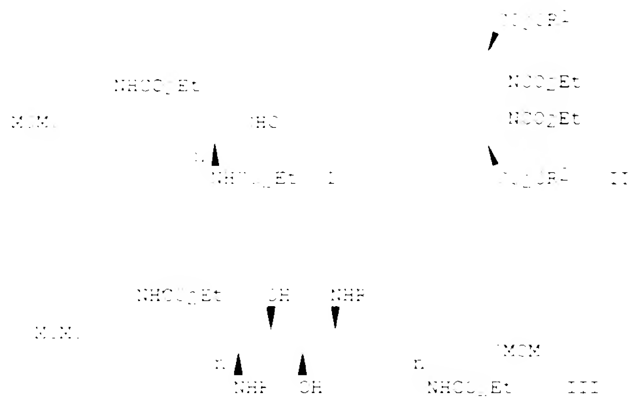
[illegible] BY [illegible]
[illegible] BY [illegible]
[illegible] BY [illegible]
[illegible] BY [illegible]
[illegible] BY [illegible]
[illegible] AVAILABLE IN [illegible] FORMAT

AN ... WEB ... COPYRIGHT ...

TI ... linear ... symmetrical 1,4-diamino-... building blocks ... kinetics, ... and pinacol coupling of ... alpha-amino aldehydes

AU Armbruster, ...; ...owski, Stefan; ..., Thomas; Prinzbach, Horst
Institut fur Organische Chemie, ... Universitat Albertstrasse, Freiburg, D-79104, Germany

Angew. Chem., Int. Ed. ...
CODEN: A... ; ISSN: ...
PB Wiley-VCH Verlag GmbH
DT Journal
LA English



AB The linear, enantiomerically pure C-8 amino aldehyde I (n = 1) is prepd. by addn. of di-Et azodicarboxylate (DEAD) to 1,3-cyclooctadiene, ...olysis, redn., and enzymic asymmetrization, by enzymic esterification of the meso diol II (R1 = R2 = H) to give monoacetate II (R1 = H, R2 = Ac). Enzymic hydrolysis of diacetate II (R1 = R2 = Ac) gave the enantiomeric monoacetate II (R1 = Ac, R2 = H). Lipozyme IM proved to be the enzyme of choice for both alternatives (...-80% yield each, ee ...). Stereoselective pinacol coupling of I (n = 1) and homolog I (n = ...) by Pedersen's reagent [V2Cl3(THF)6]2[Zn2Cl6] gave adducts in ...-...% yields, with III (R = CO2Et) being the predominant isomers. In the case of I (n = ...), ... equiv of reagent (ca. 1 equiv of V2+) was sufficient to bring about total conversion; for total conversion of I (n = ...), a significant excess of reagent was needed (... equiv, ca. 4 equiv of V2+). From III (R = CO2Et) examples for potential **libraries** of structurally varied derivs., such as cyclic ureas and pseudotetrapeptides III (R = ...-Val) are prepd.

IT **214549-56-1P**
RL: BPN (Biosynthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of linear sym. **diaminodiol** building blocks from ... olefins and pinacol coupling of amino aldehydes)

RN ... HCAPLUS

CN ... diethyl ester, ... (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT **214549-57-2P**
RL: BPN (Biosynthetic preparation); PUR (Reactant or reagent); BIOL (Biological study); PREP (Preparation)
prepn. of linear sym. **diaminodiol** building blocks from cyclic olefins and pinacol coupling of amino aldehydes
RN [illegible] (CAPLUS)
CN 1-Piperidinecarboxylic acid, 3-[(ethoxycarbonyl)amino]-2-hydroxy-6-[(methoxymethoxy)methyl]-, ethyl ester, (2S,3R,6R)-rel- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

IT **214549-86-7P**
RL: BYP (Byproduct); PREP (Preparation)
prepn. of linear sym. **diaminodiol** building blocks from cyclic olefins and pinacol coupling of amino aldehydes
RN [illegible] (CAPLUS)
CN 1-Piperidinecarboxylic acid, 3-[(ethoxycarbonyl)amino]-2-hydroxy-6-[(methoxymethoxy)methyl]-, ethyl ester, (2S,3R,6R)-rel- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT **1149-26-4** **1700-10-3**, 1,5-Cyclooctadiene
1972-28-7, Diethyl azodicarboxylate **89172-48-5**, Tetrakis(triphenylphosphine)palladium(0), reagent **183388-50-3** **214549-64-1**
RL: RCT (Reactant)
prepn. of linear sym. **diaminodiol** building blocks from cyclic olefins and pinacol coupling of amino aldehydes
RN [illegible] (CAPLUS)
CN [illegible]-N-[(methoxymethoxy)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

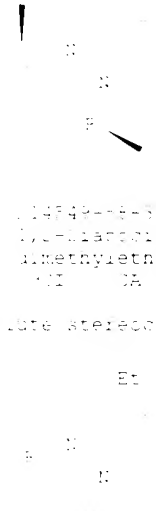
RN ... HCAPLUS
IN ... 1,4-Pyridinedicarboxylic acid, 3-[acetyloxy methyl]tetrahydro-4-
... hydroxymethyl -, diethyl ester, (3R,4S - PCT ... CA INDEX NAME

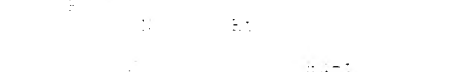
... absolute stereochemistry. Rotation +

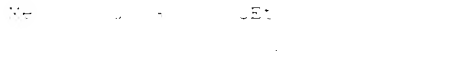
RN ... HCAPLUS
IN ... Pyramic acid, ... 1S,4R -1-formyl-4-[methoxymethoxy methyl -1,4-
... tanediyl]bis-, diethyl ester (9CI ... CA INDEX NAME

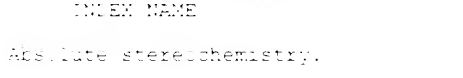
Absolute stereochemistry. Rotation +

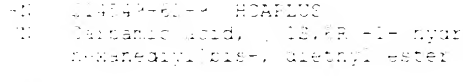
IT 32622-11-0P 214549-54-9P 214549-55-0P
214549-58-3P 214549-59-4P 214549-60-7P
214549-61-8P 214549-62-9P 214549-63-0P
214549-65-2P 214549-67-4P 214549-68-5P
214549-69-6P 214549-70-9P 214549-72-1P
214549-74-3P 214549-75-4P 214549-79-8P
214549-81-2P 214549-82-3P 214549-83-4P
214549-84-5P 214549-85-6P
RL: PRT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
... prep. of linear sym. **diaminodiol** building blocks from
... vinyl olefins and pinacol coupling of amino aldehydes
RN ... HCAPLUS
IN ... ...-bimethanocyclo[4.3.1.]dec-9-ene-7,...-dicarboxylic acid, dimethyl ester
... (9CI) (CA INDEX NAME











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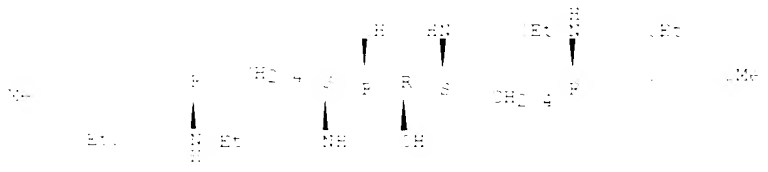

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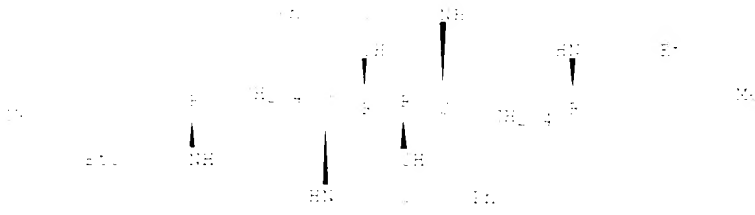
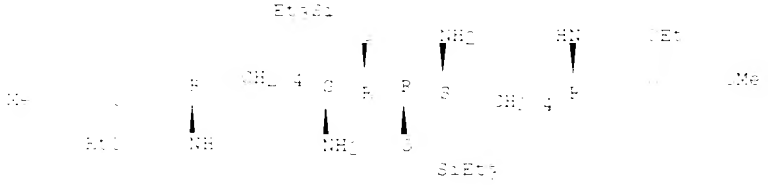


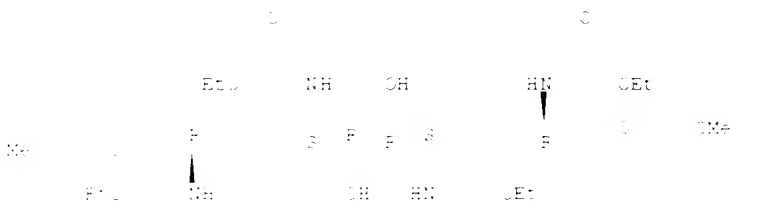
... HCAPLUS
... tetramic acid, ... IP, ...S, ...P, ...SP, ...C, ...4R ...t, ...R-1-amino-1,1...
... methoxymethoxy methyl, ... ,...-tris(trimethylsilyl) ...xy ...-1,1...
...tetradecanedioyl bis-, diethyl ester ...CI ... IN INDEX NAME

Absolute stereochemistry.



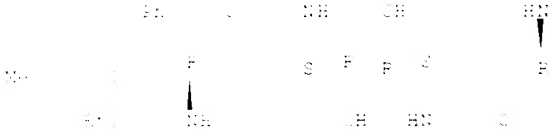
... HCAPLUS
... [1-hydroxy-3-oxido-3-dodecen-1-, 2,3,4,5,6,7,11,11-octadecoxy-2,3,6,11-
tetrakis[ethoxycarbonyl amino]-1,11-bis-O-(methoxymethyl - ...CI ... CA
INDEX NAME

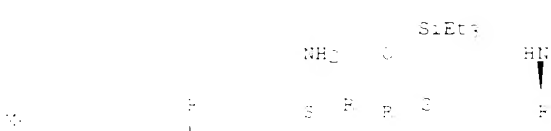
Absolute stereochemistry.



... HCAPLUS
... [1-hydroxy-3-oxido-3-dodecen-1-, 2,6-diamino-2,3,4,5,6,7,11,11-octadecoxy-2,11-
[... with ethoxycarbonyl amino]-1,11-bis-O- methoxymethyl - ...CI ... IN INDEX
NAME

Absolute stereochemistry.





RN [illegible] HCAPLUS
CN D-erythro-L-gulo-Dodecitol, [illegible],11-octadeoxy-2,11-
[illegible](ethoxycarbonyl)amino]-1,12-bis-O-(methoxymethyl)-[illegible]
[illegible](phenylmethoxy)carbonyl]amino]- (9CI) (CA INDEX NAME)

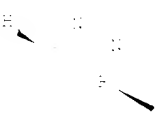
Absolute stereochemistry.

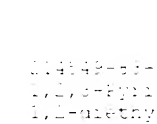
RN 214549-75-4 HCAPLUS
CN D-erythro-L-gulo-Dodecitol, 5,8-diamino-1,3,4,5,6,8,10,11-octadeoxy-2,11-
bis[(ethoxycarbonyl)amino]-1,12-bis-O-(methoxymethyl)-4,7-bis-O-
(triethylsilyl)- (9CI) (CA INDEX NAME)

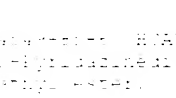
Absolute stereochemistry.

RN 214549-7[illegible] HCAPLUS
CN L-Norleucine, N-(ethoxycarbonyl)-6-[(ethoxycarbonyl)amino]-[illegible],
[illegible] (9CI) (CA INDEX NAME)

Absolute stereochemistry.





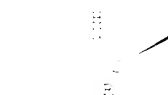


AN [illegible] HCAPLUS
TI [illegible]-Hydroxamic acid, [illegible]-fluorophenyl)-[illegible]-trifluoromethyl-substituted [illegible]-ethyl ester [illegible] - [illegible]
OA INDEX NAME

Absolute stereochemistry.

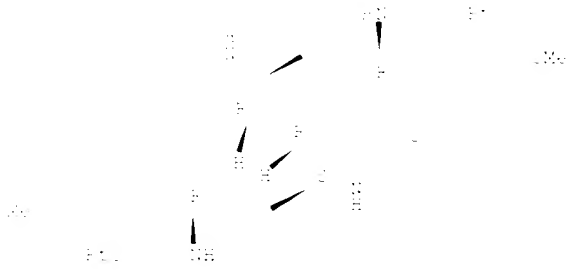
IT **214549-66-3P 214549-71-0P 214549-76-5P**
214549-77-6P 214549-78-7P 214549-80-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
preparation of linear sym. **diaminodiol** building blocks from cyclic olefins and pinacol coupling of amino aldehydes
RN [illegible] HCAPLUS
TI [arbamic acid, [[(4S,4'S,5R,5'R)-2,2'-dioxo[5,5'-bioxazolidine]-4,4'-diyl]bis[(1R)-1-[(methoxymethoxy)methyl]-5,1-pentanediyl]]bis-, diethyl ester [illegible]
OA INDEX NAME

Absolute stereochemistry.

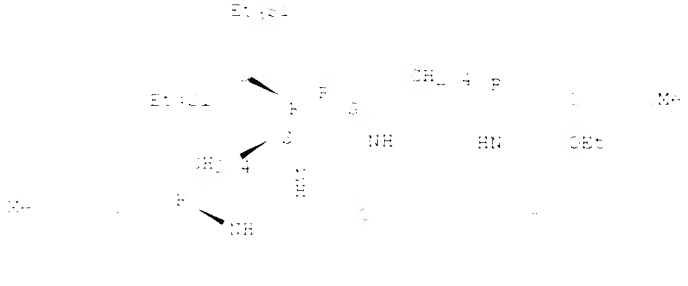


RN [illegible] HCAPLUS
TI [arbamic acid, [[(4S,4'S,5R,5'R)-2,2'-dioxo[5,5'-bioxazolidine]-4,4'-diyl]bis[(1R)-1-[(methoxymethoxy)methyl]-5,1-propanediyl]]bis-, diethyl ester [illegible]
OA INDEX NAME

Absolute stereochemistry.

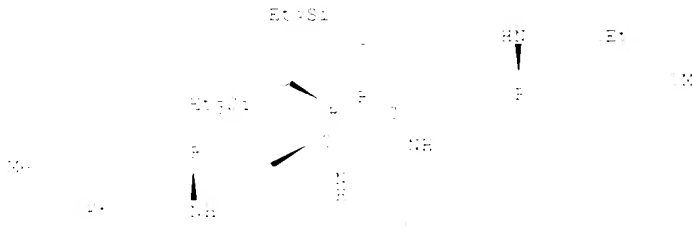


RN [illegible] HCAPLUS
IN Pyridinium acid, 1,1'-[(4S,5R,6R,7S)-hexahydro-5-oxo-4,6-bis[(triethylsilyl)oxy]-1H-1,7-diazepine-4,7-diyl]bis[1-[[(2-methoxyethoxy)methyl]-, chloride (1:2)]
[illegible] Absolute stereochemistry.



RN [illegible] HCAPLUS
IN Pyridinium acid, 1,1'-[(4S,5R,6R,7S)-hexahydro-5-oxo-4,6-bis[(triethylsilyl)oxy]-1H-1,7-diazepine-4,7-diyl]bis[1R-1-[(methoxymethoxy)methyl]-3,1-propanediyl]]bis-, diethyl ester (9CI) CA INDEX NAME

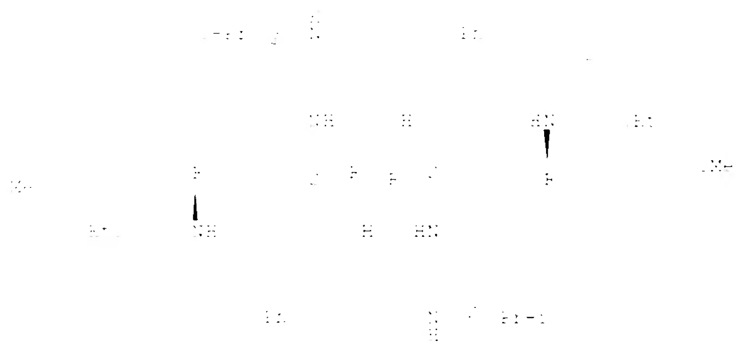
Absolute stereochemistry.



RN [illegible] HCAPLUS
IN [illegible]

[illegible] ethoxycarbonyl [illegible] phenylmethoxy carbonyl [illegible] (CA INDEX NAME)

[illegible] stereochemistry.



RN [illegible]
CN [illegible], N-(ethoxycarbonyl)-[illegible]-(ethoxycarbonyl)amino]-[illegible]-fluoro-, [illegible] ester, [illegible] (CA INDEX NAME)

Absolute stereochemistry.

[illegible]

[illegible]

TI Combinatorial libraries [illegible] aminodiol

[illegible]

AU [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

PI [illegible]

PA [illegible]

[illegible]

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

AB **Combinatorial libraries** constructed to include **aminodiol** monomer subunits connected by phosphodiester, phosphorothioate, or phosphoramidate linking moieties were described. Thus, oligomeric compds. and **libraries** of such compds. comprising a plurality of **aminodiol** monomer subunits, e.g., I [illegible] (P1 = TL or a protective group; L = cyclic alkenyl, aryl, heterocyclyl, etc.; P3,P4 = H, protective group, P(O)R, etc.; R = OH, dialkylamino, etc.; T = none, CH2, C(CR6R7)m[CR5:CR6R9]n[CR10]pE;q sic ; E,P1 = bond, NH:CH, thiobund.O, S, NR11, etc.; R10 = O, S, NR11; R6-R9,R11 = H, alkyl, aryl, etc.; m,n = 0-5; p = 0 or 1; q = 1 to about 10 sic) were prepd. by linking groups were claimed.

IT **51-35-4**, trans-4-Hydroxy-L-proline **65-71-4**, Thymine **71-30-7**, Cytosine **73-24-5**, Adenine, reactions **96-32-2**, Methyl bromoacetate **98-88-4**, Benzoyl chloride **103-82-2**, Phenylacetic acid, reactions **105-36-2**, Ethyl propiolate **107-95-9**, β-Aminopropionic acid **108-30-5**, reactions **112-35-6**, Triethyleneglycol monomethyl ether **112-47-0**, [illegible]-Undecanediol **288-32-4**, Imidazole, reactions **534-03-2**, 1-Amino-2,3-propanediol **624-49-7** **5437-45-6**, Benzyl bromoacetate **15496-36-3**, [illegible]-Hydroxyl ethyl amine **24324-17-2**, β-Ala derivatives **28920-43-6** **40615-36-9**

[illegible]

combinatorial libraries having **aminodiol**

[illegible]

RE [illegible]

[illegible]

[illegible]

RN [illegible] HCAPLUS
CN [illegible] ethyl ester [illegible] CA INDEX NAME

[illegible]

RN [illegible] HCAPLUS
CN [illegible]-Alanine [illegible] CA INDEX NAME

[illegible] CH [illegible] CO_2H

RN [illegible] HCAPLUS
CN [illegible]-Furandione, dihydro- [illegible] CA INDEX NAME

RN [illegible] HCAPLUS
CN [illegible] [illegible]-methoxyethoxy)ethoxy]- [illegible] CA INDEX NAME

[illegible] CH_2 CH_2 [illegible] CH_2 CH_2 [illegible] CH_2 CH_2 OMe

RN [illegible]-47-[illegible] HCAPLUS
CN 1,10-Decanediol [illegible] CA INDEX NAME

[illegible]

RN [illegible] HCAPLUS
CN 1H-Imidazole [illegible] CA INDEX NAME

[illegible]

RN [illegible]-2 HCAPLUS
CN 1,3-Propanediol, 2-amino- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

NH_2

[illegible] CH_2 CH CH_2 OH

RN [illegible] HCAPLUS
CN [illegible] acid [illegible], dimethyl ester [illegible] CA INDEX NAME

[illegible] geometry as shown.

171486-10-5P 171486-11-6P 172525-38-1P
172525-40-5P 172525-48-3DP, [illegible] 172525-84-7P
178113-42-3P 178113-43-4P 178113-44-5P
186429-52-7P 186429-53-8P 186429-54-9P
186429-55-0P 186429-56-1P 186429-57-2P
[illegible] combinatorial libraries [illegible] aminodiol
[illegible]
[illegible] HIGHLIGHT
[illegible]
[illegible] IN INDEX NAME

[illegible]

[illegible]

[illegible]

[illegible] HIGHLIGHT
[illegible] IN INDEX NAME

[illegible]

[illegible]

[illegible]

[illegible] HIGHLIGHT
[illegible] IN INDEX NAME

[illegible]

[illegible]

[illegible]

[illegible] HIGHLIGHT
[illegible] IN INDEX NAME

[illegible]

[illegible]

[illegible]

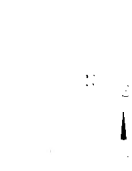
[illegible] HIGHLIGHT
[illegible] IN INDEX NAME

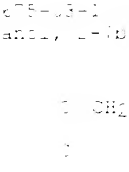
[illegible]

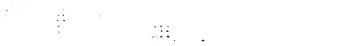
[illegible]

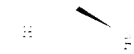
[illegible]

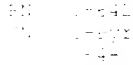
[illegible] HIGHLIGHT
[illegible] IN INDEX NAME











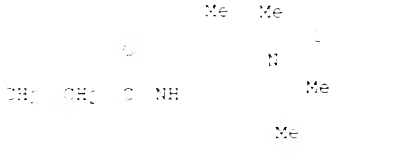
[illegible]
[illegible] ANSWERS ARE AVAILABLE. [illegible] ANSWER NUMBER ARE[illegible] KNOWN FOR [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

AN [illegible]
TI [illegible]
SO [illegible]
DT [illegible]
LA English
AB This paper describes a general approach to rapid generation and screening of catalytic materials on electrode surfaces. The properties of the resulting conducting polymers, including catalytic performance, can be modulated by varying the monomer feed ratios, monomer choice, and applied potential. Thus, the generation of the polymeric TEMPO (2,2,6,6-tetramethylpiperidin-1-yloxy) catalysts was performed by electrochem. copolymn. of 2,2'-bithiophene with the TEMPO catalyst precursors contg. pyrrole side chains. A **library** of catalyst films was obtained over a wide range of bithiophene pyrrole ratios upon automated scanning of the applied potential from +0.0 to +1.4 V vs. Ag/AgCl. The resulting catalyst films were used in both chem. and electrochem. oxidn. of primary alcs. to aldehydes.

IT **320350-43-4P**
PRU: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); PROC (Process); USES (Uses)
(electrochem. prepn. and catalyst for oxidn. of primary alcs. to aldehydes)
RN [illegible]-43-4 (CAPLUS)
CN 1-Piperidinyloxy, 2,2,6,6-tetramethyl-4-[[1-oxo-3-(1H-pyrrol-1-yl)propyl]amino]-, polymer with 2,2'-bithiophene (9CI) (CA INDEX NAME)

CM 1

CRN [illegible]-41-1
CMF [illegible]



CM 2

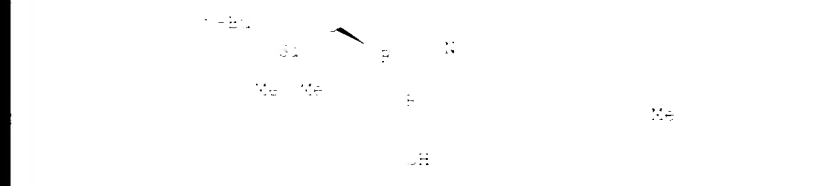
CRN [illegible]-97-7
CMF [illegible]

IT **320350-44-5P**
PRU: CAT (Catalyst use); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); PROC (Process); USES (Uses)
(electrochem. prepn. and electrocatalyst for [illegible] (electrochem. oxidn. of primary alcs. to aldehydes)
RN [illegible] (CAPLUS)

RE.CNT 6
RF
(1) Alt, H; J Chem Soc, Dalton Trans 1994, P1703 HCAPLUS
(2) Armes, S; Synth Met 1987, V20, P365 HCAPLUS
(3) Bagnell, A; Synth Met 1996, V78, P85 HCAPLUS
(4) Bartlett, P; Electrochim Acta 1990, V35, P1573 HCAPLUS
(5) Blaser, H; Stud Surf Sci Catal 1986, V41, P153 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

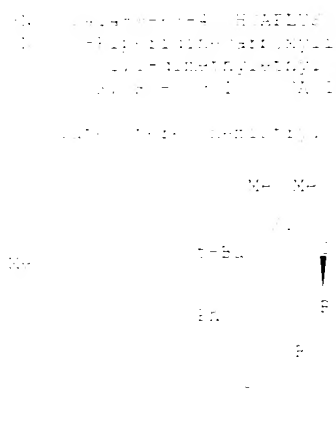
L[illegible] ANSWER [illegible] ON HCAPLUS COPYRIGHT 2004 ACS
AN [illegible] HCAPLUS
[illegible]
TI [illegible] A **library** of tetrahydroisoquinolines with diverse
[illegible]
AU [illegible]
[illegible]
CS [illegible] Inc., San Diego, CA, USA
SO [illegible], Volume date 1998-1999, 41(5), 1447-1453
[illegible]
PB [illegible]
[illegible]
LA English
CC [illegible]
AB A **combinatorial library** motif has been developed based
on orthogonally protected aminodiol scaffolds. Amine functionality was
derivatized by diverse available electrophiles including carboxylic acids,
sulfonyl chlorides, isocyanates, and aldehydes. A hydroxyl moiety was
converted to a carbamate linkage, allowing a variety of amines to be
incorporated. The scaffold was anchored to Tentagel at the second
hydroxyl via a succinyl linker, which was hydrolyzed by mild aq. basic
conditions. The method was used to make a **library** of about
17,000 different members in mixts. of 5 per sample.
IT **241489-59-8P 241489-61-2P 241489-63-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
solid-phase synthesis of a **library** of functionalized
aminodiol scaffolds
RN [illegible] HCAPLUS
CN 4-Piperidinol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-[(4-
methoxyphenyl)methyl]-, (3R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN [illegible] HCAPLUS
CN 3-Piperidinecarboxylic acid, 3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-5-
hydroxy-, 9H-fluoren-9-ylmethyl ester, (3R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 16
RE
(1) Bohmann, M; J Org Chem 1995, V60, P5949 HCAPLUS
(2) Brennan, T; Biotechnol Bioeng 1998, V61, P33 HCAPLUS
(3) Mio, C; Science 1998, V281, P1303 HCAPLUS
(4) Nagy, J; Tetrahedron Lett 1995, V36, P5949 HCAPLUS
(5) Hauske, J; Tetrahedron Lett 1995, V36(10), P1589 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

[illegible]

L[illegible] ANSWER [illegible] OF [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Selective inhibition of .beta.-1,4- and .alpha.-1,3-galactosyltransferases: donor sugar-nucleotide based approach

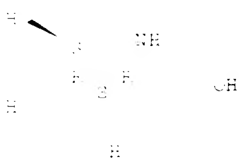
AU Takayama, Shuichi; Chung, Sang J.; Igarashi, Yasuhiro; Ichikawa, Yoshitaka; Sepp, Armin; Lechler, Robert I.; Wu, Jingyao; Hayashi, Takashi; Siuzdak, Gary; Wong, Chi-Huey
CS Department of Chemistry and The Skaggs Institute for Chemical Biology, The Scripps Research Institute, La Jolla, CA, [illegible], USA

SO Bioorg. Med. Chem. [illegible], [illegible], [illegible]
CODEN: BMECEP; ISSN: [illegible]
PB Elsevier Science Ltd.
DT Journal
LA English

AB A combined rational and library approach was used to identify bisphosphonates (IC50 = [illegible] mM) and galactose type 1-N-iminosugar (IC50 [illegible] mM) as novel motifs for selective inhibition of .beta.-1,4-galactosyltransferase (.beta.-1,4-GalT) and .alpha.-1,3-galactosyltransferase (.alpha.-1,3-GalT), resp. Our results demonstrate that, though these two galactosyltransferases both utilize the same donor sugar-nucleotide (UDP-Gal), the difference in their mechanisms can be utilized to design donor sugar or nucleotide analogs with inhibitory activities selective for only one of the galactosyltransferases. Investigation of .beta.-1,4-GalT inhibition using UDP-2-deoxy-2-fluorogalactose (UDP-2-F-Gal), UDP, and bisphosphonates, also led to the observation of metal dependent inhibition of .beta.-1,4-GalT. These observations and the novel inhibitor motifs identified in this study pave the way for the design and identification of even more potent and selective galactosyltransferase inhibitors.

IT **108147-54-2**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(selective inhibition of .beta.-1,4- and .alpha.-1,3-galactosyltransferases using a donor sugar-nucleotide based approach)
RN [illegible] HCAPLUS
CN 3,4,5-Piperidinetriol, 2-(hydroxymethyl)-, (2R,3S,4R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



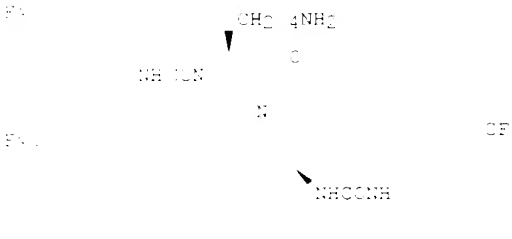
RE.CNT [illegible]
RE
1 Alavi, A; Glycoconj J 1995, V12, P206 HCAPLUS
2 Andree, P; Biochemistry [illegible], [illegible], [illegible] HCAPLUS
3 Atack, J; J Pharm Exp Ther [illegible], [illegible], [illegible] HCAPLUS
4 Babad, H; J Biol Chem 1966, V241, P2672 HCAPLUS
5 Bell, J; J Biol Chem 1976, V251, P3003 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L [illegible]

AN [illegible]
AU [illegible]
CS [illegible]
TI Solid-phase synthesis of [illegible] **combinatorial libraries**
IN [illegible]
PA [illegible]
SO [illegible]
[illegible]
DT [illegible]
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	A1	[illegible]	[illegible]	[illegible]

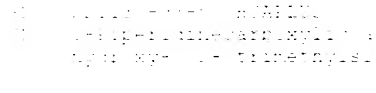
PI [illegible]
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, EP, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU [illegible] A1 [illegible] AU [illegible]
PRAI US [illegible]
WO [illegible]
MARPAT [illegible]

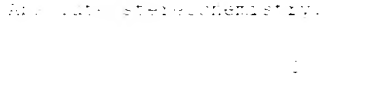


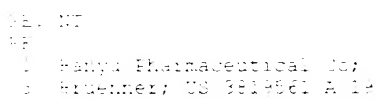
AB Monocyclic, bicyclic and oligomeric amines with at least two sites of diversity are formed from monocyclic scaffolds which can be cyclized to form bicyclic amine scaffolds. These can then be reacted with building blocks to form the desired amines. **Libraries** of monocyclic, bicyclic and oligomeric amines are also prepd. The products have bactericidal activity, acting on phospholipases A2. Thus, the ind. inhibited the inhibition of several strains of bacteria by [illegible].

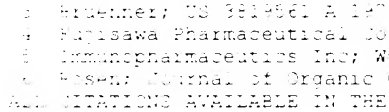
IT **221137-91-3P 221137-93-5P**
RL: PRT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
prepn. and bactericidal activity of ureidoalkylpiperazines
RN [illegible]
CN 4-Piperazinol, 5- [1,1-dimethylethyl dimethylsilyl)oxy]-1- 4-methoxyphenyl methyl]-, 5P - 4CI CA INDEX NAME

[illegible]









L [illegible]

ANSWER [illegible] HCAPLUS COPYRIGHT [illegible] ACS

ACCESSION [illegible] HCAPLUS
DOCUMENT [illegible]
TITLE [illegible] 1,4-dipolar cycloaddn. of an azidoester and subsequent sodium cyanoborohydride reduction of the resulting bicyclic vinylogous urethane to give a bicyclic aminolactone allows access to an eight carbon homolog of .alpha.-homomannojirimycin. I which is a weak fucosidase inhibitor. Intermediates with both an .alpha.- and .beta.-amino acid moiety are described and may be useful for incorporation of homopipecolic acids into novel peptide libraries.
AUTHOR(S) [illegible] Marchel, Nina E.; Nash, Robert J.; Bell, Edward W.; Allwood, Alla L.; Arand, Mahesh; Fleet, George W. J.
CORPORATE SOURCE Dyson Perrins Laboratory, Oxford University, Oxford, UK, OX1 3QY, UK
SOURCE Tetrahedron: Asymmetry (2005), 16(20), 3411-3414
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER Elsevier Science Ltd.
DOCUMENT TYPE Journal
LANGUAGE English
ENTRY DATE Entered STN: [illegible]

AB A thermally induced intramol. 1,3-dipolar cycloaddn. of an azidoester and subsequent sodium cyanoborohydride redn. of the resulting bicyclic vinylogous urethane to give a bicyclic aminolactone allows access to an eight carbon homolog of .alpha.-homomannojirimycin I which is a weak fucosidase inhibitor. Intermediates with both an .alpha.- and .beta.-amino acid moiety are described and may be useful for incorporation of homopipecolic acids into novel peptide **libraries.**

IT **220309-41-1P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and fucosidase inhibition of an eight carbon homolog of .alpha.-homomannojirimycin via a bicyclic aminolactone)
RN [illegible]-41-1 HCAPLUS
CN 3,4,5-Piperidinetriol, 2- (hydroxymethyl)-6- (hydroxymethyl)-, (2R,3S,4S,5R,6R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RE.CNT [illegible]
RE
(1) Arand, M; Biochemistry [illegible], [illegible], PAGE [illegible] HCAPLUS
(2) Arand, M; J Med Chem [illegible], [illegible], PAGE [illegible] HCAPLUS
(3) Arand, M; Nat Prod [illegible], [illegible], PAGE [illegible] HCAPLUS
(4) Fleet, G; J Chem Soc Perkin Trans 1 [illegible], PAGE [illegible] HCAPLUS
(5) Ayers, S; Phytochemistry [illegible], [illegible], PAGE [illegible] HCAPLUS
RLE [illegible] CITATIONS AVAILABLE IN THE RE FORMAT

L[illegible]

AN ANSWER [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AU [illegible] HCAPLUS
TI [illegible]
TI [illegible] different polymer-based sensor elements and method [illegible]
[illegible]
IN [illegible] Nelson, Kristen M.; Rakow, Robert H.; Lehman, Brett; Dahnel, Brandi
[illegible]
PA [illegible] State Institute of Technology, USA
SO U.S. Pat. Appl. Publ.
[illegible]
DT Patent
LA English
FAN.CNT [illegible]

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	A1	[illegible]	[illegible]	[illegible]

PI [illegible]
AB The present invention provides a **combinatorial** approach for prepg. arrays of chem. sensitive polymer-based sensors which are capable of detecting the presence of a chem. analyte in a fluid in contact therewith. The described methods and devices comprise combining varying ratios of at least 1st and 2nd org. materials which, when combined, form a polymer or polymer blend that is capable of absorbing a chem. analyte, thereby providing a detectable response. The detectable response of the sensors prepd. by this method is not linearly related to the mole fraction of at least one of the polymer-based components of the sensors, thereby making arrays of these sensors useful for a variety of sensing tasks.
IT **89014-30-2D**, Poly piperidine , derivs.
RL: [illegible] Analytical reagent use ; DEV (Device component use ; ANST (Analytical study); USES (Uses)
analyte detection in fluid by sensor array based on polymer **combinatorial library**
RN [illegible]
CN Piperidine, homopolymer (9CI) (CA INDEX NAME)

OTHER [illegible]

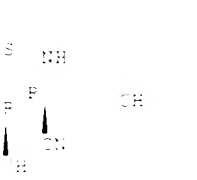
CRN [illegible]
CMF [illegible]

[illegible]

RE.CNT [illegible]
RE
(1) [illegible]
(2) [illegible]
(3) [illegible]
(4) [illegible]
(5) [illegible]
ALL [illegible]

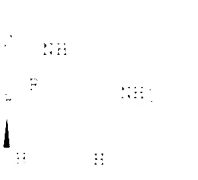
L-- ANSWER - OF 17 HCAPLUS COPYRIGHT ---- ACS
AN ---------- HCAPLUS
DN ----------
TI Chemoenzymic synthesis of aminocyclitol derivatives: a useful
library strategy for the development of selective glycosyltransferase
enzyme inhibitors
AU ---, Paul; Martin, Reinhard; Takayama, Shuichi; Wong, Chi-Huey
CS Department of Chemistry and the Skaggs Institute for Chemical Re-----, The
Scripps Research Institute, La Jolla, CA, 92037, USA
SO J. Org. Chem. Lett. ----, - , -, ----
CODEN: JOCEAH; ISSN: ---- - ----X
PB American Chemical Society
DT Journal
LA English
AB A chemoenzymic strategy has been developed for the synthesis of
libraries of aminocyclitol derivs. for the discovery of new and
selective glycosidase inhibitors.
IT 194301-25-2
RL: BAC (Biological activity or effector, except adverse ; RCT (Reactant ;
RIOL (Biological study
(chemoenzymic synthesis of aminocyclitol derivs., a useful
library strategy for the development of selective
glycosyltransfer enzymes inhibitors
RN ----- [-----] (HCAPLUS
CN 3-Piperidinecarbonitrile, 3,4,5-trihydroxy-2- hydroxymethyl -6-methyl-,
(2R,3R,4R,5R,6S - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

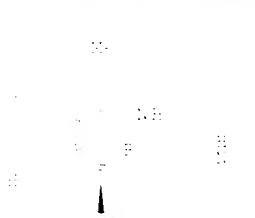


IT 194301-26-3P 219917-68-7P
RL: BAC (Biological activity or effector, except adverse ; PCT (Reactant ;
SPN (Synthetic preparation); BIOL (Biological study ; PREP (Preparation
(chemoenzymic synthesis of aminocyclitol derivs., a useful
library strategy for the development of selective
glycosyltransfer enzymes inhibitors
RN 194301-26-3P HCAPLUS
CN 3,4,5-Piperidinetriol, 2-(aminomethyl)-2-(hydroxymethyl -6-methyl-,
(2R,3R,4R,5R,6S - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN ----- HCAPLUS
CN [-----amino] acid, -[6-(hydroxymethyl)-2,3,4,5-tetrahydroxy-6-
hydroxymethyl -2-methyl-3-piperidinyl]methyl]amino] ethyl]-, phenylmethyl
ester (9CI) (CA INDEX NAME)

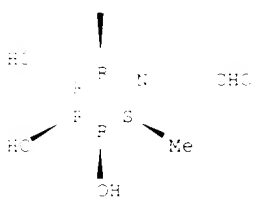


IT **219917-65-4P 219917-66-5P 219917-67-6P**
BIOL (Biological activity or effector, except adverse); PREP (Preparation); BIOL (Biological study); PREP (Preparation
(Aminoglycoside synthesis of aminocyclitol derivs., a useful **library** strategy for the development of selective nucleosyltransfer enzymes inhibitors
RN 219917-65-4 HCAPLUS
CN Acetamide, 2-amino-N-[[2R,3R,4R,5R,6S -3,4,5-trihydroxy-6- hydroxymethyl -4-methyl-2-piperidinyl]methyl]- (9CI) (CA INDEX NAME

Absolute stereochemistry.

RN 219917-66-5 HCAPLUS
CN 1-Piperidineacetaldehyde, 3,4,5-trihydroxy-2-(hydroxymethyl)-6-methyl-, (2R,3R,4R,5R,6S)- (9CI) (CA INDEX NAME

Absolute stereochemistry.



RN 219917-67-6 HCAPLUS
CN Propanamide, 2-amino-3-hydroxy-N-[[2R,3R,4R,5R,6S -3,4,5-trihydroxy-6-(hydroxymethyl) -4-methyl-2-piperidinyl]methyl]-, (2S - (9CI) (CA INDEX NAME

Absolute stereochemistry.

217298-94-7

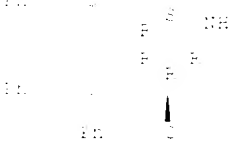
...ynthesis of aminocyclitol derivs., a model...
library strategy for the development of selective...
...ransferase enzymes inhibitors

...HCAPLUS

...phenyl, trimethyl-, 1,4,5-tris phenylmethoxy -6- (phenylmethoxy methyl...

...A INDEX NAME

...ute stereochemistry.



...NT ...

...

(1) Headman, A; Tetrahedron Lett 1998, V39, P151 HCAPLUS
(2) Brimowitz, L; Tetrahedron Lett 1994, V35, P6449 HCAPLUS
(3) Deshpande, P; Nature 1997, V387, P164 HCAPLUS
(4) Flynt, B; J Chem Soc Chem Commun 1985, P841 HCAPLUS
(5) Flynt, B; Tetrahedron Lett 1988, V31, P4439 HCAPLUS

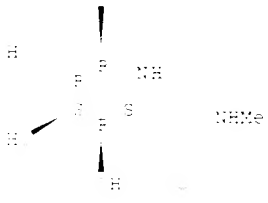
... CITATIONS AVAILABLE IN THE RE FORMAT

L[illegible] AN [illegible]

AN [illegible]
IT [illegible]
TI [illegible] for incorporation of tetrahydroxypipecolic acid analogs of alpha.- and beta.-D-mannopyranose into **combinatorial libraries**
AU [illegible]
CS [illegible]
SO [illegible]
DT [illegible]
LA English
AB [illegible]

AN [illegible]
CC [illegible]
IT [illegible]
AB Azasugars have the distinction as a class of natural products in that most of them have been synthesized before they were isolated. Syntheses of .alpha.- and .beta.-homomannonjirimycin rely on the stereoselective and chemoselective sodium cyanoborohydride redn. of a [3.3.0] bicyclic imine lactone to give a single [3.3.1] bicyclic amino-lactone. Methanolysis under basic conditions is accompanied by efficient epimerization of the first formed .alpha.-amino-ester to the more stable .beta.-amino-ester in which the 2,6-substituents are equatorial. Both the [3.3.1] bicyclic amino-lactone and the .beta.-amino-ester are suitable intermediates for the incorporation of tetrahydroxypipecolic acid derivs. into **combinatorial libraries** directly. .alpha.- and .beta.-Trihydroxyl analogs of aza-D-mannopyranose, resp. Methylamides are shown to be specific and potent inhibitors of two .beta.-N-acetylglucosaminidases but have no effect on an .alpha.-N-acetylgalactosaminidase. The synthesis of .alpha.- and .beta.-manno-pipecolic acids is also reported.
IT **219589-69-2P 219589-71-6P 219589-72-7P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(intermediates for incorporation of tetrahydroxypipecolic acid analogs of mannopyranose into **combinatorial libraries**)
RN [illegible] (STN)
CN 2-Piperidinecarboxamide, 3,4,5-trihydroxy-6- hydroxymethyl -N-methyl-, (2S,3R,4S,5R,6R - 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN [illegible] (STN)
CN 2-Piperidinecarboxamide, 3,4,5-trihydroxy-6- hydroxymethyl -N-methyl-, (2R,3R,4S,5R,6R - 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN ... HCAPLUS
CN ... -Piperidinecarboxylic acid, 3,4,5-trihydroxy-6- hydroxymethyl -,
... 3R,4S,5R,6R - 9CI ... CA INDEX NAME

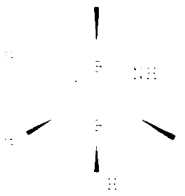
Absolute stereochemistry. Rotation + .

IT 127995-29-3P, .alpha.-Homomannonirimycin 219589-70-5P
219589-83-0P
RL: SPN (Synthetic preparation); PREP (Preparation
intermediates for incorporation of tetrahydroxypipecolic acid analogs
of mannopyranose into **combinatorial libraries**
RN 127995-29-3 HCAPLUS
CN 3,4,5-Piperidinetriol, 2,6-bis(hydroxymethyl -, 2R,3R,5R,6R - 9CI ... CA
INDEX NAME

Absolute stereochemistry. Rotation + .

RN ... HCAPLUS
CN ... -Piperidinecarboxylic acid, 3,4,5-trihydroxy-6- hydroxymethyl -,
...3R,4S,5R,6R - 9CI ... CA INDEX NAME

Absolute stereochemistry. Rotation + .



RELOAD
RE
1 Asano, M; J Med Chem 1998, V41, PUBS HCAPLUS
2 Asano, M; J Nat Prod 1998, V61, PUBS HCAPLUS
3 Hallberg, A; J Org Chem 1985, P1915 HCAPLUS
4 Martinelli, L; Tetrahedron:Asymmetry 1997, V8, P1471 HCAPLUS
5 Pelletier, E; Bioorg Med Chem Lett 1996, V6, P1419 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L[illegible] ANSWER [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
DN [illegible]
TI [illegible] supports Tailored for Rapid Synthesis: Parallel Polymer Synthesis via Sequential Normal Living Free Radical Processes
AU [illegible] Lennis P.; Datta, Anita; Wentworth, Paul, Jr.; Janda, Kim D.
CS Department of Chemistry and The Skaggs Institute for Chemical Biology, Scripps Research Institute, La Jolla, CA, 92037, USA
SO J. Am. Chem. Soc. [illegible], [illegible], [illegible]
CODEN: JACSAT; ISSN: [illegible]
PB American Chemical Society
DT [illegible]
LA English
AB It expand the availability and soly. range of polymer supports for solid-phase org. synthesis (SPOS). We have applied a sequential normal and "living" free radical polym. to generate a **library** of 24 copolymers possessing either block or graft architecture with initiator and a diverse set of vinyl monomers. The structure, mol. wt., and polydispersity (PD) of the individual **library** members have been detd. by size exclusion chromatog. (SEC), 1H and 13C NMR, and as a function of the soly. of each polymer in a range of solvents. One copolymer, polyBS-LS (Mn = 17 000, PD = 1.84) derived from 4-tert-butylstyrene (BS), 3,4-dimethoxystyrene (LS) has a soly. profile sol. in toluene, THF (THF), ether, acetone and methylene chloride (DCM), insol. in methanol and water, that is different from the present polymer support (PS) for LPOS, polyethylene glycol (PEG), and was studied in stoich. details as a new support in LPOS. The .alpha.-nitrile groups of polyBS-LS are reduced smoothly with LiAlH4 in THF to give the amino functionalized copolymer (0.14 mmol g-1 of amino groups based on a quant. ninhydrin anal.). Kinetic studies have revealed that derivatization of the amino groups of the copolymer with 4-dimethylaminocinnamaldehyde occurs at a comparable rate to a soln. counterpart (kpolyLS = 3.49 L mol-1 h-1 vs 4-aminohexane = 6.69 L mol-1 h-1). Following reaction with N-glutaryl-(2S,4S)-4-diphenylphosphino-2-[(diphenylphosphino)methyl]pyrrolidine and exchange of Rh(I), the resulting phosphine cont. copolymer, catalyzes the enantioselective hydrogenation of (Z)-N-acetamidoacrylic acid to N-acetylalanine in THF. An 87% enantiomeric excess (ee) of (S)-N-acetylalanine is obtained, comparable to that obsd. with a homogeneous phosphine ligand. This work highlights the power of a parallel polymer synthesis strategy, from conception to application, for the generation of polymers possessing unique soly. profiles and functionality which can serve as novel supports in LPOS.
IT **213994-83-3P 213994-85-5P 213994-88-8P**
213994-90-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
parallel polymer prepn. via sequential normal living free radical polymn.)
RN [illegible] HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-phenyl-2-[(2,2,6,6-tetramethyl-1-piperidinyl)oxy]ethyl ester, polymer with ethenylbenzene and 4-ethenyl-1,2-dimethoxybenzene, graft (9CI) (CA INDEX NAME)

[illegible]

RN [illegible]
MF [illegible]

[illegible]

[illegible]

CM [illegible]

RN [illegible]
MF [illegible] H11 [illegible]

Me

Me

CH = CH_2

CM [illegible]

CRN [illegible]
CMF [illegible]

H [illegible] CH Ph

RN [illegible]-84-[illegible] HCAPLUS
CN [illegible]-Propenoic acid, [illegible]-methyl-, [illegible]-phenyl-2-[(2,2,6,6-tetramethyl-1-piperidinyl)oxy]ethyl ester, polymer with 4-ethenyl-1,[illegible]-dimethoxybenzene ([illegible]) (CA INDEX NAME)

CM 1

CRN [illegible]-84-57-1
CMF C21 H31 N O3

Ph O CH2
Me Me
CH CH2 O C C Me
N
Me
Me

CM 2

CRN 638[illegible]-23-0
CMF C1[illegible] H12 O2

OMe

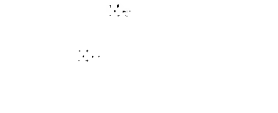
Me

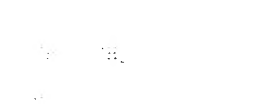
CH = CH_2

RN [illegible]-84-[illegible] HCAPLUS
CN [illegible]-Propenoic acid, [illegible]-methyl-, [illegible]-phenyl-2-[(2,2,6,6-tetramethyl-1-piperidinyl)oxy]ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone ([illegible]) (CA INDEX NAME)

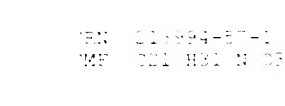
CM [illegible]

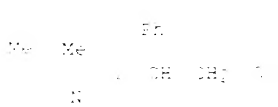
CRN [illegible]-84-57-1
CMF C21 H31 N O3

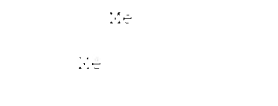


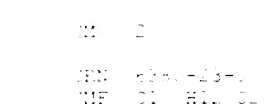


RN 1193944-11-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-phenyl-2-(2,2,6,6-tetramethyl-1-piperidinyl oxy)ethyl ester, polymer with 4-ethenyl-1,2-dimethoxybenzene and 1-ethenyl-2-pyrrolidinone, graft (9CI) (CA INDEX NAME)









L[illegible] ANSWER [illegible] OF [illegible] HCAPLUS COPYRIGHT [illegible] ACS

AN [illegible] HCAPLUS

TI Apparatus and method for solid-phase synthesis of chem. **libraries** using multidimensional movable arrays

IN Ainsworth, D. Mac A.

PA Irori Laboratories, Inc., USA

SO PCT Appl., [illegible] pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO [illegible]	A1	[illegible]	WO [illegible]	[illegible]
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US [illegible]	A	[illegible]	US [illegible]	[illegible]
AU [illegible]	A1	[illegible]	AU [illegible]	[illegible]
EP [illegible]	A1	[illegible]	EP [illegible]	[illegible]
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
[illegible]	A	[illegible]		
WO [illegible]	W	[illegible]		

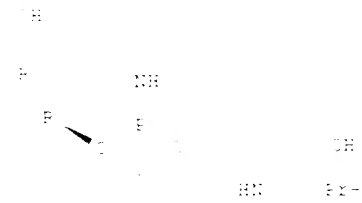
AB A mem. synthesis app. is described for building chem. compds. including a nozzle assembly having an array of movable nozzles coupled to reservoirs of reag. reagents and a base assembly having an array of reaction wells. A transport mechanism aligns selected nozzle columns in the X-direction, and independently controllable sliders move nozzle columns in the Y-direction. The first sliding seal and the plurality of second sliding seals form enclosed reaction wells while permitting reagent delivery. A gas inlet and outlet sweep away fumes emitted by reagents. Methods of compd. synthesis from chem. components are also provided. The app. permits the synthesis of chem. **libraries**.

IT **211571-40-3P 211571-41-4P 211571-42-5P**
211571-43-6P 211571-44-7P 211571-45-8P
211733-81-2P 211733-82-3P
PL: SPN (Synthetic preparation); PREP (Preparation)
solid-phase synthesis of chem. **libraries** using multidimensional movable arrays

RN [illegible]-41-3 HCAPLUS

CN Phosphoramidic acid, cyclopropyl-, 3-hydroxy-2-[(2-methyl-1-oxopropyl amino]propyl 3R,5R -5-hydroxy-1- phenylmethyl -3-piperidinyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



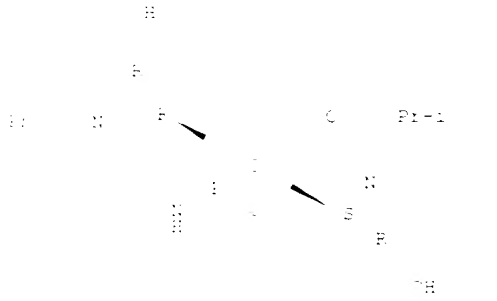
RN [illegible]-41-4 HCAPLUS

CN Phosphoramidic acid, cyclopropyl-, [1-[(hydroxyethyl-(2-methyl-1-oxopropyl amino]ethyl 3R,5R -5-hydroxy-1- phenylmethyl -3-piperidinyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

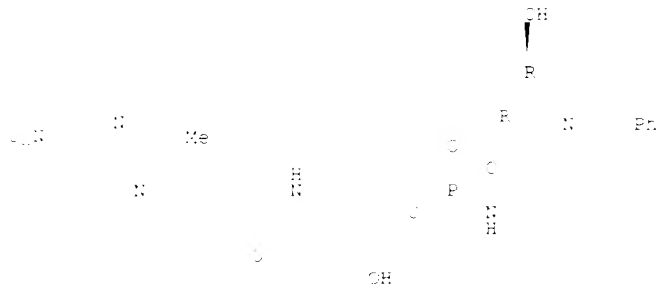
RN [illegible] HCAPLUS
CN Phosphoramidic acid, cyclopropyl-, [(2R,4S)-4-hydroxy-2-methyl-1-(4-pyridinylmethyl)-2-piperidinyl]methyl 3S,5S)-5-hydroxy-1-(phenylmethyl)-3-piperidinyl ester, rel- (9CI) (CA INDEX NAME

Relative stereochemistry.



RN [illegible] HCAPLUS
CN Phosphoramidic acid, cyclopropyl-, 3-hydroxy-2-[(5- 2-methyl-4-nitro-1H-imidazol-1-yl -1-oxopropyl]amino]propyl 3R,4R -5-hydroxy-1- phenylmethyl -4-piperidinyl ester, rel- (9CI) (CA INDEX NAME

Relative stereochemistry.

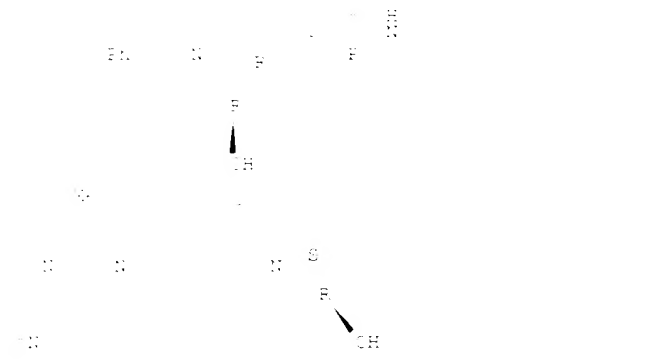


RN [illegible] HCAPLUS
CN Phosphoramidic acid, cyclopropyl-, 2-, 2-hydroxyethyl 3- 2-methyl-4-nitro-1H-imidazol-1-yl -1-oxopropyl]amino]ethyl 3R,5R -5-hydroxy-1- phenylmethyl -3-piperidinyl ester, rel- (9CI) (CA INDEX NAME

Relative stereochemistry.

AN ...'l-- -- HCAPLUS
TI Phosphoramidic acid, cyclopropyl-, [4- hydroxymethyl-1-(1-methyl-4-
nitro -1H-imidazol-5-yl -1- (2-propyl-3-pyrrolidinyl)methyl
ester, rel- (3R,4S -4-hydroxy-1- phenylmethyl -3-piperidinyl ester, rel- (3
(CA INDEX NAME

Relative stereochemistry.



AN 211731-81-0 HCAPLUS
TI Phosphoramidic acid, cyclopropyl-, [4- hydroxymethyl-1-(1-methyl-1-
(2 propyl -5-pyrrolidinyl)methyl 3R,5R -5-hydroxy-1- phenylmethyl -3-
piperidinyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

AN 211731-84-3 HCAPLUS
TI Phosphoramidic acid, cyclopropyl-, [4- hydroxymethyl-1-(1-methyl-4-
nitro-1H-imidazol-5-yl -1- (2-propyl-3-pyrrolidinyl)methyl
(3R,4S -4-hydroxy-1- phenylmethyl -3-piperidinyl ester, rel- (9
(CA INDEX NAME

Relative stereochemistry.

L ?? DA AUTHOR ..

AN [illegible] ... B ... H APRIL [illegible] COPYRIGHT ... ACS
TI [illegible] ... HERRIFIELD
SO ... ...
AB Novel ... synthesis of solid substrates. In the ... [illegible]
... polythiophenes equipped ... adequate linkers allowing ... [illegible] and ... [illegible]
... [illegible] ... N ... an ... with ... fully reversible ... [illegible]
... ...
AU [illegible], J. P.; Marsmans, ...; Simonet, J.
CS Laboratoire d'Electrochimie Moleculaire et Macromoleculaire, UMR ...
... Universite de Rennes I, Rennes, [illegible], Fr.
SO Tetrahedron Lett., 54 pp., 4413-4414
... CODEN: TETRAB; ISSN: ... 4...-4...
PB Elsevier Science Ltd.
DT ... Journal
LA English
AB Functionalized polythiophenes were evaluated as **Merrifield** ... resins by the anchoring of amine functions together with ... synthesis processes. Suitable linkers were terminated with ... fully ... aldehyde ... sulfonamide moiety. The C-N bond was ... to liberate the amine with high selectivity under very mild conditions by ... method means with amine liberation. Moreover, a ... is ... in the ... allows the further grafting of various amine functions.
RN **212262-29-8P**
PL. ... Synthetic preparation ; PREP Preparation
... prepn. of polythiophene-supported amines by cleavage of ... sulfonamide ...
RN [illegible] HCAPLUS
CN Piperidine, ...-[[4-[[2- ...-thienyl ethoxy methyl]phenyl]sulfonyl]-,
... Copolymer ... CA INDEX NAME

CM ...

CRN [illegible]-20-9
CMF C16 H13 N O3 S2

PAGE 1-A

S

CH2

CH2

C

CH2

... S ...

[illegible]

[illegible]

COPYRIGHT

PATENT NO. KIND DATE APPLICATION NO. DATE

AB In the films, reducing agents of hydrazine derivs. I = carbamoyl, acyl, alkoxycarbonyl, aryloxycarbonyl; J = at. groups forming unsatd. rings are incorporated in coupler-contg. layers, and layer A contg. precursors of developing agents, layer B contg. anionic-group-having macromols., and layer C contg. mordants are arranged in A/B/C oder. The couplers generate diffusible dyes. The films show excellent storage stability and provide high-d. images.

IT **108265-62-9**

RL: TEM (Technical or engineered material use); USES (Uses)
Ag halide photog. films developable with developer-free activator solns. at **high throughput**

RN 108265-62-9

CN Piperidinium, 1-[(ethenylphenyl)methyl]-1-methyl-, chloride, polymer with ethenylbenzene and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 80117-24-6

CMF C15 H22 N . Cl

CM 2

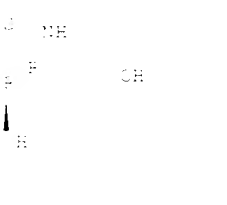
CRN 100-42-5

CMF C8 H8

L[illegible]

ANSWER [illegible] ACCESSION [illegible]
TI [illegible]
AU [illegible]
CS [illegible]
SO [illegible]
AB [illegible] **Combinatorial** chem. has become an important method [illegible] identifying effective ligand-receptor binding, new catalysts and enzyme inhibitors. In order to distinguish the most active component of a **library** [illegible] obtain structure-activity relationships of cmpds. in a **library**, an efficient quant. assay is crucial. Electrospray mass spectrometry has become an indispensable tool for qual. screening **combinatorial libraries** and its use for quant. assay has recently been demonstrated. Results: This paper describes the use of quant. electrospray mass spectrometry for screening **libraries** of inhibitors of enzymic reactions, specifically the enzymic glycosylation by .beta.-1,4-galactosyltransferase, which catalyzes the transfer of galactose from uridine-5'-diphosphogalactose to the 4-position of N-acetylglucosamine .beta.OBn. Butbenzene [illegible], from N-acetyllactosamine .beta.OBn. Our mass spectrometric screening approach showed that both nucleoside diphosphates and triphosphates inhibited galactosyltransferase while none of the nucleoside monophosphates, including uridine-5'-monophosphate, showed any inhibition. Addnl. **libraries** were generated in which the concns. of the inhibitors were varied and, using mass spectrometry, uridine-5'-diphosphate-2-deoxy-2-fluorogalactose was identified as the best inhibitor.
IT **198691-35-9**
RL: ANT (Analyte ; BAC (Biological activity or effector, except adverse ; ANST (Analytical study ; BIOL (Biological study
quant. electrospray mass spectrometry for the rapid assay of enzyme inhibitors
RN [illegible]-35-9 HCAPLUS
CN 3,4,5-Piperidinetriol, 2- hydroxymethyl -6-methyl-, [illegible].alpha.,3.beta.,4.alpha.,5.alpha.,6.alpha.- (9CI) (CA INDEX NAME

Relative stereochemistry.



COPYRIGHT 1998 ACS

AN 1998:181793 HCAPLUS
DN 128:181793
TI Preparation of hydroxyethylamine isosteres as HIV and FIV protease inhibitors
IN Marchel, Ellen; Hanley, Michael R.; Lucas, Patrick
PA Icos Corporation, USA; Wang, Wei-Hsung; Jones, Jeffrey H.; Lee, Hsiao-Ling
SO PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9806707	A1	19980219	WO 1997-US14067	19970811

DS AT, AU, AM, AT, AT, AU, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

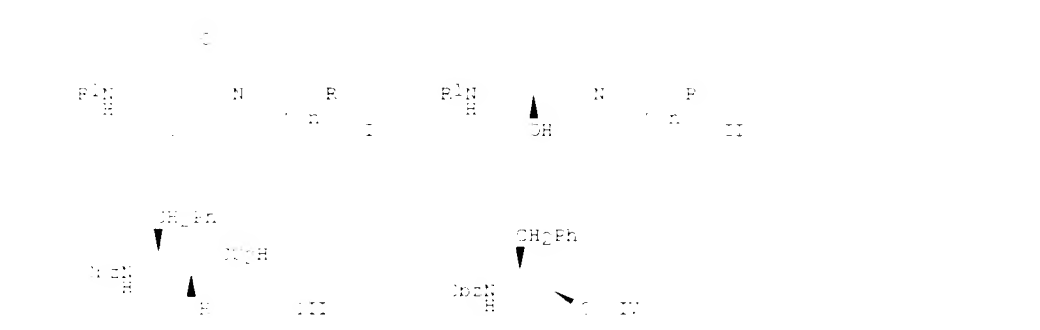
CA 2263811	AA	19980219	CA 1996-2263811	19960812
AU 9718644	A1	19980303	AU 1997-18644	19960812
AU 716373	B2	20000224		
EP 873351	A1	19981028	EP 1996-943897	19960812

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 11510832	T2	20000928	JP 1997-511485	19960812
BRAI 08 1996-8608830	A2	19991207		
NO 1998-718671	W	19981209		

PRAI MARPAT 128:181793

RE



AB **Combinatorial libraries** of HIV and FIV protease inhibitors are characterized by (alpha,-keto amide or hydroxyethylamine isostere structures I and II (n = 1, 2; R = H or more groups CONHCHMe2, CH2CH, CH2 Me, CH2 CH(CH3)2, CH2Ph, 1-4 alkoxy, optionally nitro-substituted 2-, 3-, or 4-Me2CHCH2O, 2,3- or 3,4-methylenedioxy, methoxyethoxymethoxy, etc.; R1 = PhCH2CO2 tBuO2C, Me2CHO2C, BnO2C, R, H, H2, PhCH2, 1-4 alkoxy, optionally nitro-substituted 2-, 3-, or 4-MeO2CH2CH2O, 2,3- or 3,4-methylenedioxyphenylmethoxy, ethoxy

[illegible] libraries [illegible]

IT 191850-51-8P 191850-52-9P 191850-63-2P
191850-64-3P 191850-65-4P 191850-66-5P
191850-67-6P 191850-69-8P 191850-71-2P
191850-75-6P 191850-77-8P 191850-78-9P
191850-79-0P 191850-80-3P 191850-81-4P
191850-82-5P 191850-83-6P 191850-84-7P
191850-85-8P 191850-86-9P 191850-87-0P
191850-88-1P 191850-89-2P 191850-90-5P

[illegible]

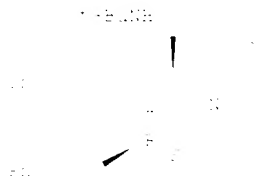
RN 191850-51-8P HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1-phenylmethyl propyl]-, phenylmethyl ester, [2S-[1 R*,2.alpha.,3.beta.,4.alpha.,5.beta.]]- (9CI) (CA INDEX NAME

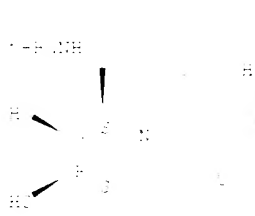
Absolute stereochemistry.

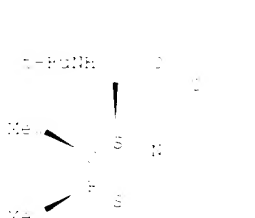
RN 191850-52-9P HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1-phenylmethyl propyl]-, phenylmethyl ester, [2S-[1 R*,2.alpha.,3.beta.,4.alpha.,5.beta.]]- (9CI) (CA INDEX NAME

Absolute stereochemistry.

RN [illegible] HCAPLUS
CN [illegible] (CA INDEX NAME







Absolute stereochemistry.

RN 141550-64-3 HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trihydroxy-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.alpha.,4.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

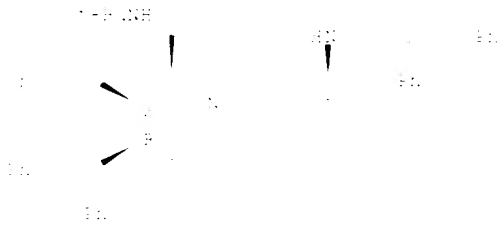
Absolute stereochemistry.

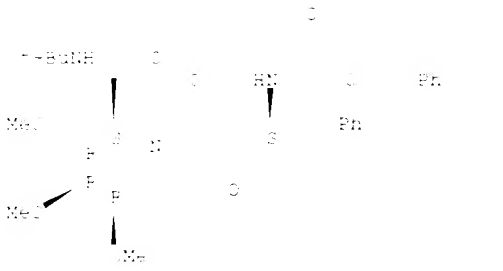
RN 141550-65-4 HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.alpha.,4.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 141550-66-5 HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-tris(phenylmethoxy)-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.alpha.,4.alpha.,5.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.





RN [illegible] HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trihydroxy-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.beta.,4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

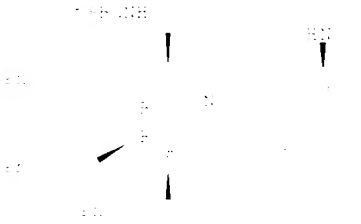
Absolute stereochemistry.

RN 161650-69-8 HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.beta.,4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

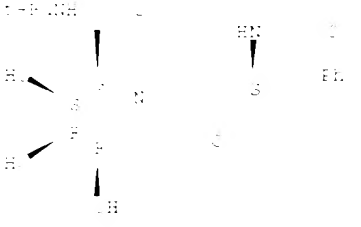
RN [illegible] HCAPLUS
CN Carbamic acid, [3-[2-[[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-tris(phenylmethoxy)-1-piperidinyl]-2,3-dioxo-1-(phenylmethyl)propyl]-, phenylmethyl ester, [2S-[1(R*),2.alpha.,3.beta.,4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



PX [illegible] HCAPLUS
TI Carbamic acid, [3-[[2-[[1,1-dimethylethyl amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1- phenylmethyl propyl]-, phenylmethyl ester, [2S-[1 R* [S*,alpha.,S*,alpha.,4.alpha.,5.alpha.]]- [illegible] (A INDEX NAME

A[illegible] [illegible] stereochemistry.

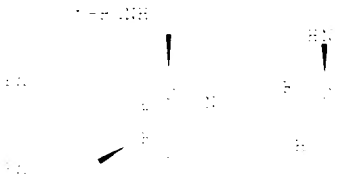


PX [illegible] HCAPLUS
TI Carbamic acid, [3-[[2-[[1,1-dimethylethyl amino]carbonyl]-3,4,5-trimethoxy-1-piperidinyl]-2,3-dioxo-1- phenylmethyl propyl]-, phenylmethyl ester, [2S-[1 R* [S*,alpha.,S.alpha.,4.alpha.,5.alpha.]]- [illegible] (A INDEX NAME

A[illegible] [illegible] stereochemistry.

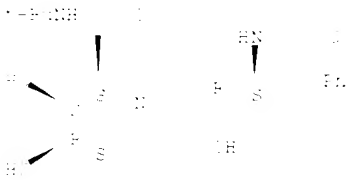
PX [illegible] HCAPLUS
TI Carbamic acid, [3- [2-[[1,1-dimethylethyl amino]carbonyl --,4,5-trim phenylmeth.xy -1-piperidinyl]-2,3-dioxo-1- phenylmethyl propyl -, phenylmethyl ester, [2S- [1 R* [S*,alpha.,S.alpha.,4.alpha.,5.alpha. -[illegible] (A INDEX NAME

A[illegible] [illegible] stereochemistry.



AN ... 1-[1-[...-oxo-... HCAPLUS
IN Carbamic acid, [3-...-[[2-[[1,1-dimethylethyl amino]carbonyl]-...,4,5-trimethoxy-
...-piperidinyl]-...-hydroxy-1- phenylmethyl propyl]-, phenylmethyl ester,
...S-[1 IP*,...* ,...alpha.,...alpha.,4.alpha.,...beta.]- ... IN INDEX
NAME

Absolute stereochemistry.



RN ...-[1-[[2-[[3-[2-[[1,1-dimethylethyl amino]carbonyl]-3,4,5-trimethoxy-
...-piperidinyl]-2-hydroxy-1- phenylmethyl propyl]-, phenylmethyl ester,
...S-[1 IP*,2S* ,2.alpha.,3.alpha.,4.alpha.,5.beta.]]- ... IN INDEX
NAME

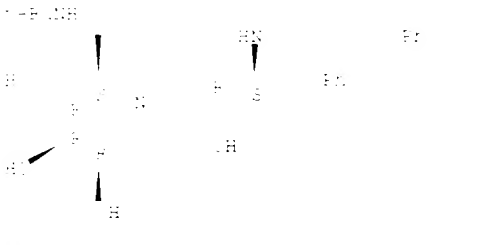
Absolute stereochemistry.

RN ...-[1-[[2-[[3-[2-[[1,1-dimethylethyl amino]carbonyl]-...,4,5-
trimethoxy -1-piperidinyl]-2-hydroxy-1- phenylmethyl propyl]-,
phenylmethyl ester, [2S-[1 IP*,2S* ,2.alpha.,3.alpha.,4.alpha.,5.beta.
... IN INDEX NAME

Absolute stereochemistry.

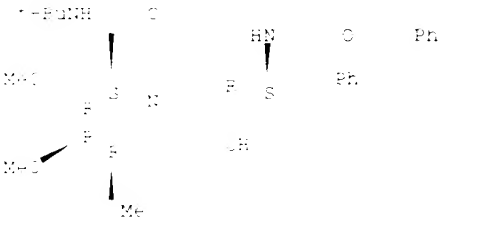
RN [illegible] HCAPLUS
CN Carbamic acid, [3-[3-[[(1,1-dimethylethyl amino]carbonyl]-3,4,5-trimethoxy-
1-piperidinyl]-2-hydroxy-1- phenylmethyl propyl]-, phenylmethyl ester,
[1S-[1 [R*,[S* ,[1.alpha.,3.beta.,4.alpha.,5.alpha.]]- [illegible] CA INDEX
NAME

Absolute stereochemistry.



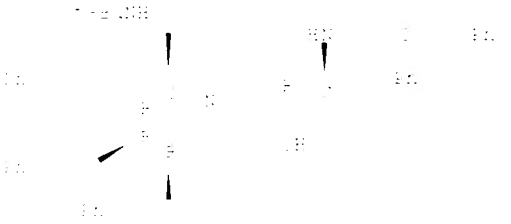
RN 189610-66-9 HCAPLUS
CN Carbamic acid, [3-[3-[[(1,1-dimethylethyl amino]carbonyl]-3,4,5-trimethoxy-
1-piperidinyl]-2-hydroxy-1- phenylmethyl propyl]-, phenylmethyl ester,
[1S-[1 [R*,[S* ,[1.alpha.,3.beta.,4.alpha.,5.alpha.]]- [illegible] CA INDEX
NAME

Absolute stereochemistry.



RN [illegible] HCAPLUS
CN [illegible] 1,1-dimethylethyl amin [illegible] -3,4,5-
trimethoxy-1- piperidinyl]-2-hydroxy-1- phenylmethyl propyl]-,
phenylmethyl ester, [1S-[1 [R*,[S* ,[1.alpha.,3.beta.,4.alpha., [illegible]
[illegible] CA INDEX NAME

Absolute stereochemistry.

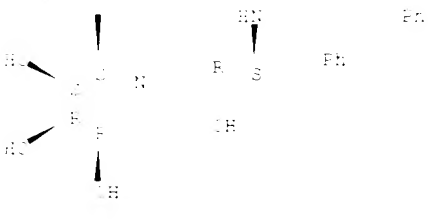


[illegible]

[illegible]

[illegible]

[illegible]

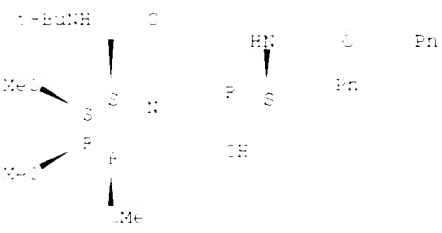


[illegible]

[illegible]

[illegible]

[illegible]



[illegible]

[illegible]

[illegible]

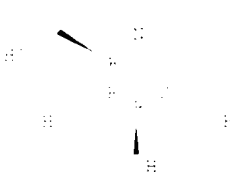
[illegible]

IT 19130-96-2
PLU: RCT Reactant
prepn. of hydroxyethylamine core structures as HIV and FIV protease inhibitors
RN ...-...-... HCAPLUS
CN ...,...,...-Piperidinetriol, ...- hydroxymethyl -, ...,...,...,... - ... CA INDEX NAME

Absolute stereochemistry. Rotation ...

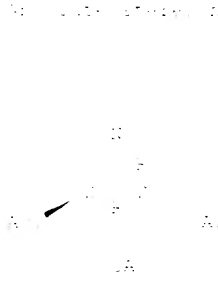
IT 130539-12-7P 153373-56-9P 153373-57-0P
166411-19-4P 166411-20-7P 172139-94-5P
191850-39-2P 191850-40-5P 191850-41-6P
191850-42-7P 191850-43-8P 191850-44-9P
191850-45-0P 191850-46-1P 191850-47-2P
191850-48-3P 191850-49-4P 191850-50-7P
191851-30-6P 191851-31-7P 191851-32-8P
191851-33-9P 191851-34-0P 191851-35-1P
191851-36-2P 191852-19-4P 191852-23-0P
PLU: RCT Reactant ; SPN Synthetic preparation.; PREP Preparation.
prepn. of hydroxyethylamine core structures as HIV and FIV protease inhibitors
RN ...-...-...-... HCAPLUS
CN ...-Piperidinecarboxylic acid, ...,...,...-trihydroxy-...- hydroxymethyl -, phenylmethyl ester, ...-(...alpha.,...beta.,...alpha.,...beta.)- ... CA INDEX NAME

Absolute stereochemistry.



RN ...-...-...-... HCAPLUS
CN ...-Piperidinecarboxylic acid, ...,...,...-tris(acetyloxy)-...-[[[...,...-dimethylethyl][diphenylsilyl]oxy]methyl]-, phenylmethyl ester, (...R-(...alpha.,...beta.,...alpha.,...beta.)- ... CA INDEX NAME

...

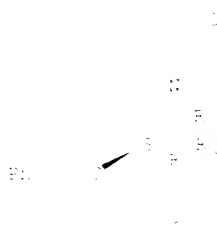


...

...

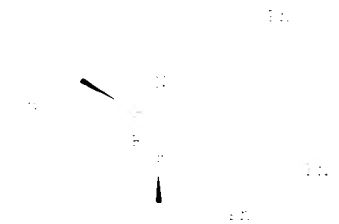
...

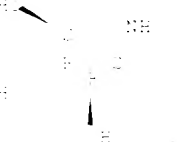
...



...

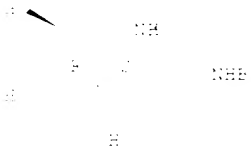
...





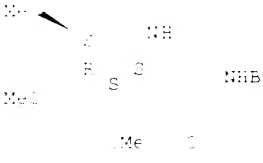
RN [illegible] HCAPLUS
CN -Piperidinecarboxamide, N- 1,1-dimethylethyl -3,4,5-trihydroxy-,
    [illegible]- [illegible]alpha.,3.alpha.,4.alpha.,5.beta.)- 9CI (CA INDEX NAME)

Absolute stereochemistry.



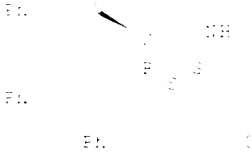
RN [illegible] HCAPLUS
CN -Piperidinecarboxamide, N- 1,1-dimethylethyl -3,4,5-trimethoxy-,
    [illegible]- 3.alpha.,4.alpha.,5.beta.)- 9CI (CA INDEX NAME)

Absolute stereochemistry.



RN [illegible] HCAPLUS
CN -Piperidinecarboxamide, N- 1,1-dimethylethyl -3,4,5-tris phenylmethoxy -,
    [illegible]- 3.alpha.,4.alpha.,5.beta.)- 9CI (CA INDEX NAME)

Absolute stereochemistry.

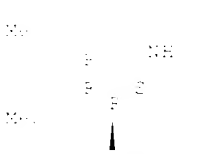


RN [illegible] HCAPLUS
CN -Piperidinecarboxamide, N- 1,1-dimethylethyl -3,4,5-trihydroxy-,
    [illegible]- 3.beta.,4.alpha.,5.alpha.)- 9CI (CA INDEX NAME)

Absolute stereochemistry.

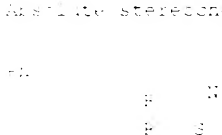
RN ...-4'-... HCAPLUS
CN ...-Piperidinecarboxamide, N-(1,1-dimethylethyl)-...,4,5-tris(phenylmethoxy)-,
...-(...alpha.,3.beta.,4.alpha.,5.alpha.)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



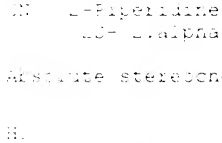
RN ...-4'-... HCAPLUS
CN ...-Piperidinecarboxamide, N-(1,1-dimethylethyl)-3,4,5-tris(phenylmethoxy)-,
...-(...alpha.,3.beta.,4.alpha.,5.alpha.)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



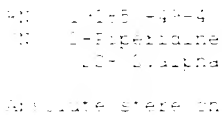
RN ...-4'-... HCAPLUS
CN ...-Piperidinecarboxamide, N-(1,1-dimethylethyl)-3,4,5-trihydroxy-,
...-(...alpha.,3.alpha.,4.alpha.,5.alpha.)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN ...-4'-... HCAPLUS
CN ...-Piperidinecarboxamide, N-(1,1-dimethylethyl)-3,4,5-trimethoxy-,
...-(...alpha.,3.alpha.,4.alpha.,5.alpha.)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



AN [illegible] HCAPLUS
IN 1-Pi[illegible]arboxamide, N-[2,2-dimethylethyl]-[illegible]phenylmethyl ester, (2P-
    [illegible]alpha.,3.alpha.,4.alpha.,5.alpha.)- (9CI) CA INDEX NAME

Abs[illegible]olute [illegible]chemistry.

PN [illegible]
    [illegible] NH
    [illegible] NHBu-t
    [illegible]

    [illegible]

AN [illegible] HCAPLUS
IN 1-Piperidinecarboxylic acid, 2-[[[1,1-dimethylethyl diphenylsilyl]oxy]methyl]-3,4,5-trimethoxy-, phenylmethyl ester, (2P-
    2.alpha.,3.beta.,4.alpha.,5.beta.)- (9CI) CA INDEX NAME

Absolute stereochemistry.

    [illegible]

Me[illegible]
    [illegible] N [illegible] Ph
    [illegible] Bu-t
Me [illegible] Si
    [illegible]Me Ph Ph

RN [illegible] HCAPLUS
IN 1-Piperidinecarboxylic acid, 2-hydroxymethyl-3,4,5-trimethoxy-, phenylmethyl ester, (2P-2.alpha.,3.beta.,4.alpha.,5.beta.)- (9CI) CA INDEX NAME

Absolute stereochemistry.

RN ... HCAPLUS
IN ... 1,2-Piperidinedicarboxylic acid, 3,4,5-trimethoxy-, 1- phenylmethyl ester, [2S-(2.alpha.,3.beta.,4.alpha.,5.beta.)]- (9CI) CA INDEX NAME

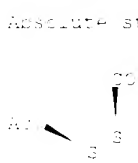
Absolute stereochemistry.

RN ... HCAPLUS
IN ... 1,2-Piperidinedicarboxylic acid, 3-[(1,1-dimethylethyl amino)carbonyl]-3,4,5-trimethoxy-, phenylmethyl ester, [2S- (2.alpha.,3.beta.,4.alpha.,5.beta.)]- (9CI) CA INDEX NAME

Absolute stereochemistry.

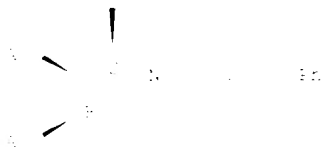
RN ... HCAPLUS
IN ... 1,2-Piperidinedicarboxylic acid, 3,4,5-tris acetyloxy -, 1- phenylmethyl ester, [2S-(2.alpha.,3.alpha.,4.alpha.,5.beta.)]- (9CI) CA INDEX NAME

Absolute stereochemistry.



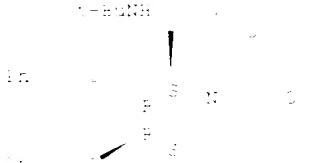
RN ... HCAPLUS
IN ... 1-Piperidinedicarboxylic acid, 3,4,5-tris acetyloxy -2- (1,1-dimethylethyl amino)carbonyl-, phenylmethyl ester, [2S-(2.alpha.,3.alpha.,4.alpha.,5.beta.)]- (9CI) CA INDEX NAME

Absolute stereochemistry.



RN 191551-13-0 HCAPLUS
CN 1-Piperidinecarboxylic acid, 2-[(1,1-dimethylethyl)amino]carbonyl]-3,4,5-tris(phenylmethoxy)-, phenylmethyl ester, (2S-(2.alpha.,3.beta.,4.alpha.,5.beta.))- (9CI) (CA INDEX NAME

Absolute stereochemistry.



[illegible]

[illegible] ANSWER [illegible] HARRIS [illegible] COPYRIGHT [illegible] ACS
AN [illegible]
TI [illegible]
SO [illegible]
[illegible]
AU [illegible]
CS [illegible]
[illegible]
[illegible]
SO [illegible]
CODEN: ANBIAL; ISSN: [illegible]
DT Article
LA English
AB A **high-throughput** assay for UDP-Glc:1,3-.beta.-D-glucan synthase (EC 2.4.1.34, UDP-glucose:1,3-.beta.-D-glucan, 1,3-.beta.-D-glucosyltransferase) from fungi and higher plants is described. The assay is performed in microtiter plates and is extremely sensitive compared to other std. assays for these enzymes. The assay is principally achieved by replacing the conventional substrate UDP-[14]Glc with the nonradioactive counterpart, and the nonradioactive glucan product is quantified as a fluorescent complex following specific interaction with the fluorochrome present in com. aniline blue. In addn., the assay is [illegible] In fact, the assay is highly reproducible and nearly as sensitive as radioactive assays and has the addnl. advantages of increased safety and avoidance of the need for filtration and washing steps to collect the glucan product. As such, the assay is highly suitable for **high-throughput** screening for inhibitors of these enzymes.
IT **19130-96-2**, Lexonoprimycin
PL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BIF (Biological process); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(microtiter-based fluorescence assay for 1,3 -.beta.-glucan synthases)
RN [illegible] HCAPLUS
CN [illegible] (9,9'-Bis-1H-indazole, 3- hydroxymethyl -, 2R,3R,4R,5S - [illegible] TA INDEX NAME)

Absolute stereochemistry. Rotation [illegible].

[illegible]

COPYRIGHT

AB L-Deoxyrhamnojirimycin (I) does not inhibit naringinase significantly but 1-epi-L-deoxyrhamnojirimycin (II) is a potent inhibitor. Conversely, alpha.-L-glycosides, e.g. III (R = H, CH2OH), of I are good inhibitors of L-rhamnosidase whereas those of II are not. Intermediate azabicyclic lactones are likely to be of use for the incorporation of a no. of trihydroxypipecolic acids into peptide **libraries**.

IT **135395-45-8**
BIOL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
prepn. and inhibition of naringinase by piperidine analogs of L-rhamnose

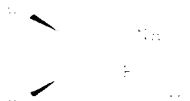
RN 135395-45-8
CN 3,4,5-Piperidinetriol, 2-methyl-, (2S,3S,4S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

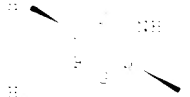
IT **135395-58-3P 185745-43-1P 185745-75-9P**
185745-80-6P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
prepn. and inhibition of naringinase by piperidine analogs of L-rhamnose

RN 135395-58-3
CN 3,4,5-Piperidinetriol, 2-methyl-, (2R,3S,4S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



[illegible]



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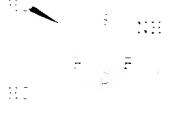


[illegible]

[illegible]

L11 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2011 ACS on STN

RN 26587-22-4

CN 1-Propene, 1-ethenyl-, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1

PCT 437-03-4

PMS 37 REG N ?

CM 1

CRN 26587-22-4

CMS 37 REG N ?

CM 2

CRN 7732-18-5

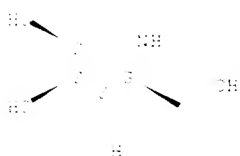
CMS 37 REG N ?

[illegible]

[illegible]

L41 ANSWER [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
DN [illegible]
TI [illegible] synthesis [illegible] dihydroxyacetone phosphate [illegible] glycerol phosphate oxidase [illegible]
AU [illegible]
CS [illegible] Chem. Biochem. [illegible]
SO Angew. Chem. [illegible] Angew. Chem., Int. Ed. [illegible]
CODEN: ANCEAD; ISSN: [illegible]
DT [illegible]
LA German
OS CASREACT [illegible]
AB These phosphates are obtained in high yield and purity by treating [illegible]-glycerol phosphate bis(cyclohexylammonium) salt (I) with an aldehyde, glycerol phosphate oxidase (II) and an aldolase in the presence of catalase. Thus, I ([illegible] mmol), glyceraldehyde ([illegible] mmol), II ([illegible]), catalase ([illegible]), and L-rhamnulose-1-phosphate aldolase ([illegible]) in H_2O were incubated under [illegible] to give [illegible] L-fructose-1-phosphate, isolated as its bis(cyclohexylammonium) salt. Phosphate-modified products, such as 1-deoxy-L-fructose-1-**phosphoramidate**, were also obtained by this method.
IT **117821-07-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by enzymic aldol reaction)
RN 117821-07-5 HCAPLUS
CN 3,4,5-Piperidinetriol, 2-(hydroxymethyl)-, (2S,3S,4S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L41 also comes from L6, L26 & or L32 cpds

text searching

AUTHOR

L11 ANSWER [illegible] HCAPLUS COPYRIGHT 2010 ACS on STN

AU [illegible] MARCHEL

TI **Combinatorial** [illegible] synthesis [illegible] **aminodiols**.

SO [illegible] Marchel, A., [illegible] Polymer Chemistry, Inst. Bioinnanotechnol., Salisbury, Md., [illegible]

CODEN: [illegible]

DT [illegible] Abstract

LA English

AB **library** [illegible] [illegible] compds. based on **aminodiol** [illegible] has been prepd. The scaffold was attached to Wang resin [illegible] Fmoc-protected aminoalkyl bromide linker, then derivatized with different electrophiles at the nitrogen to yield ureas, sulfonamides, amides, and tertiary amines. The second hydroxyl is converted to an alkyl. bromide with carbonyl diimidazole, then further converted to a carbamate with a variety of amines. The mild linking chem. is amenable to use with com. available protected and unprotected reagents, thus allowing a variety of reactive groups to be introduced while avoiding laborious prepn. of further reagents. The compds. were synthesized at a rate of 48 compds. per day as mixts. of five compds. per well using a Bristol parallel array or well synthesizer. Complete synthetic details and preliminary [illegible] data for this set of compds. will be presented.

text searching

STN INTERNATIONAL

ANSWER [illegible] HIGHLIGHT [illegible]

TI Preparation of benzimidazole derivatives and **combinatorial libraries**

IN [illegible]

PATENT NO. KIND DATE APPLICATION NO. DATE
[illegible]

AB The invention relates to novel benzimidazole derivs. I [R1-R4 = H, halo, protected OH, cyano, un substituted alkyl, alkynyl, alkoxy, aryl, heterocyclyl, carbamoyl, etc.; R5 = H, un substituted alkyl, Ph, phenylalkyl, CO2H, amino, heterocyclyl, etc.; R6 = -D-W-E-, wherein W = bond, un substituted phenylene, cycloalkylene, arylene, heterocyclene, etc.; D = un substituted cycloalkylene, phenylene, NH, etc.; E = bond, groups given for D; R7, R8 = H, resin, un substituted alkyl, Ph, heterocyclyl, cycloalkenyl, sulfonyl or carbonyl derivs.; with provisos requiring that one of R1-R4 = un substituted NHNH when R6 = NH]. The invention further relates to **combinatorial libraries** contg. two or more such compds., as well as methods of prepg. them. The compds. are potentially useful due to their activity. For instance, a **library** of 96,256 such benzimidazole derivs. was prepd. in arrays of 96 arom. or heteroarom. alkenylenes or amino acids, 96 diamines, and 96 amines. The synthetic method involved coupling of an N-protected amino acid component to an amine resin, deprotection of the amino acid component resin, acylation of the amine with 4-fluoro-3-nitrobenzoic acid, displacement of the fluoro group with an amine component, reduction of the nitro group to an amine, condensation of the aldehyde with an aldehyde component, and cleavage from the support with HF. An

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[illegible] in II, [illegible] from [illegible] [illegible] [illegible] [illegible] [illegible] piperazine, and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

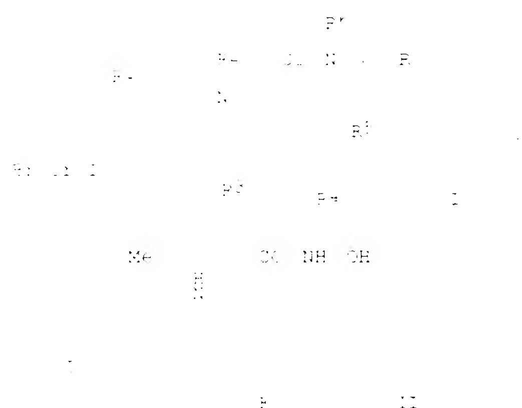
[illegible] Pharma [illegible] [illegible]

L4 ANSWER [illegible] OF [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Preparation of [illegible]-phenylaminobenzamides and analogs as MEK inhibitors for the treatment of chronic pain
IN [illegible], Alistair; Lee, Kevin; [illegible], Robert [illegible]
PA Warner-Lambert Company, USA
SO PCT Int. Appl., [illegible] pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI W[illegible]	A[illegible]	[illegible]	WO [illegible]-US1[illegible]34[illegible]	[illegible]

W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-144292P P 19990716
OS MARPAT 134:131517
GI



AB The title compds. I [illegible] wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, [illegible] CN; R2 = H; R3, R4, and R5 = independently H, OH, halo, CF3, alkyl, alkoxy, [illegible], CN, or [illegible] or NH m CH2 nR9; R9 = H, OH, COOH, or NR10R11; [illegible] [illegible]; R10 and R11 = independently H, alkyl, or taken together with the N to which they are attached form a heterocycle; R6 = H, [illegible] alkyl, aryl, [illegible], or aralkyl; R7 = H, [illegible] alkyl, alkenyl, alkynyl, or heterocyclyl, were prepd. using conventional and **combinatorial** synthetic methods for the treatment of chronic pain. [illegible] [illegible] THF was [illegible] [illegible] and [illegible] propylamine in THF [illegible]

[illegible]

ANSWER [illegible] COPYRIGHT [illegible] ACS

AN [illegible]
TI Methods of inhibiting amyloid protein aggregation, treating Alzheimer's disease, and imaging amyloid deposits using [illegible] phenylalkyl phenyl amine derivatives and analogs
IN [illegible]
PA [illegible]
SO [illegible]
DT [illegible]
LA [illegible]
FAN.CNT [illegible]

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PI [illegible]
DESIGNATED STATES: [illegible]
PRAI [illegible]
AB [illegible]
ST [illegible]

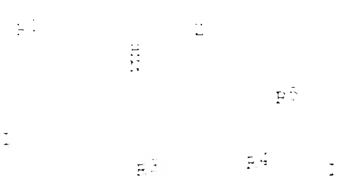
[illegible] and [illegible] bioassays. For instance, title [illegible] II was prepd. by [illegible] [illegible] reaction of [illegible] with [illegible] [illegible] phosphonium [illegible] [illegible] [illegible] [illegible] [illegible] A **combinatorial** method [illegible] prepn. [illegible] described.

L[illegible] ANSWER [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Preparation of [illegible]-4-bromo [illegible] 4-iodo phenylamino benzoic acid derivatives [illegible] MEK inhibitors for use as antiviral agents
IN [illegible], Alexander James; Dudley, David Thomas; [illegible], Stephen [illegible]; [illegible], Annette Lynn; [illegible], Alan [illegible]; [illegible], [illegible]
PA Warner-Lambert Company, USA
SO PCT Int. Appl., [illegible] pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

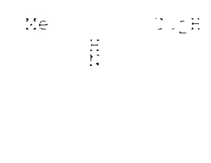
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO [illegible]	A1	20000713	WO 1999-US3[illegible]	1999122[illegible]

W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1999-[illegible] P 1999010[illegible]
OS MARPAT [illegible]
GI



I



II

AB The title compds. I [wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, or CN; R3-R[illegible] = independently H, OH, halo, CF3, alkyl, alkoxy, NO2, CN, or [illegible] or NH m- CH2 n-R9, where R9 = H, OH, CO2H, or NR10R11; m = [illegible] or 1; n = [illegible]-4; R10 and R11 = H, alkyl, or taken together with the N to which they are attached form a 3-10 membered ring; Z = CO2R7, tetrazolyl, CONR6R7, CONHNR10R11, or CH2OR7; R6 and R7 = independently H, [illegible] alkyl, alkenyl, alkynyl, aryl, [illegible] hetero aryl, or taken together with the N to which they are attached form a 3-10 membered ring, etc.] were prepd. by [illegible] **combinatorial** synthetic methods involving the addn. of [illegible] benzoic acids to halo anilines and optional redn. or amidation of the [illegible]. For example, treatment of [illegible]-amino-[illegible]-iodotoluene in THF with LDA in THF heptane ethenylbenzene soln., followed by addn. of 2,4-difluorobenzoic acid in THF afforded II. In assays evaluating the ability to prevent and inhibit growth of human cytomegalovirus (HCMV) and herpesvirus (HSV-[illegible]), [illegible]-methyl-4-[illegible] phenylamino [illegible]-N-cyclopropylmethoxy-[illegible],4-difluoro [illegible] benzamide [illegible] gave IC50 of [illegible] and [illegible], resp., with TC50 of [illegible] and [illegible], resp. [illegible] anti-HIV activity with EC50 of [illegible] and TC50 of [illegible]. Thus, I are

[illegible] MMP inhibitors that are useful in the treatment and prevention [illegible]
[illegible] inflammatory diseases, especially arthritis, and pharmaceutical [illegible]

[illegible]

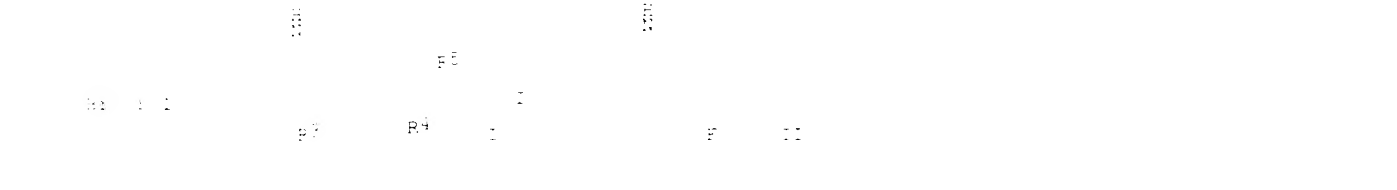
[illegible] Entry, 1 Apr [illegible] AVAILABLE
[illegible] Entry, 22 Apr [illegible] AVAILABLE
[illegible] Entry, 17 Jun [illegible] JOURNAL; Prelim. [illegible] AVAILABLE
[illegible] Entry, 15 Jul [illegible] JOURNAL OR UPDATE, 15 Jul [illegible] AVAILABLE
[illegible] Added or Updated, 15 Jul [illegible] AVAILABLE
MAR1 VIEWING AVAILABLE IN THE RE FORMAT

L[illegible] ANSWER [illegible] OF [illegible] HCAPLUS COPYRIGHT 2001 ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Preparation of 2- [illegible]-4-biaryl or 4-[1,2]-phenylamino [illegible] acid derivatives as MMP inhibitors for the treatment of asthma
IN Brittain, Alexander James; Dudley, David Thomas; Morley, James Leslie; [illegible], Alan Robert
PA Warner-Lambert Company, USA
SO PCT Int. Appl., [illegible] pp.
[illegible]
Patent
LA English
FAN.CNT [illegible]

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI [illegible]	A2	[illegible]	WO [illegible]	[illegible]
[illegible]	A3	[illegible]		

W: AE, AL, AU, BA, BB, BG, BR, BA, CN, CR, CU, CZ, DM, DE, DK, EE, HR, HU, ID, IL, IN, IS, JP, KE, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UG, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

IPRAI US [illegible]-[illegible] P [illegible]
OS MARPAT 133:[illegible]



AB The title compds. [illegible] (wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, or NO; R2-R5 = independently H, OH, halo, CF3, alkyl, alkoxy, NO2, CN, or [illegible] R NHC(=O)-CH2 n-R6, where R6 = H, OH, CO2H, or NR10R11; n = [illegible]; R10 and R11 = H, alkyl, or taken together with the N to which they are attached form a 5-10 membered ring; Z = CO2R7, tetrazolyl, C(=O)NR8R9, or NHSO2R10; R8 and R9 = independently H, [illegible] alkyl, alkenyl, alkynyl, acyl, [illegible] aryl, or taken together with the N to which they are attached form a 5-10 membered ring, etc., were prepd. by [illegible] or combinatorial synthetic methods involving the addn. of naphthalenic acids to haloanilines and optional reen. [illegible] amidation. [illegible] For example, treatment of 4-amino-5-iodotoluene in THF with [illegible] THF methane ethenylbenzene sulfn., followed by addn. of 2,4-difluorophenyl acid in THF afforded [illegible]. In an in vitro assay, (2R)-2-methyl-4-[[4-phenylamino -N-hydroxy-5,6-difluoro-2-naphthalenesulfonyl]-amino]butanamide [illegible] inhibited gelatinase activity with [illegible] IC50 [illegible] nM. In an adoptive-transfer asthma model [illegible] ovalbumin-sensitized lymphocytes cultured in the presence of R1 [illegible], the latter inhibited BAL eosinophilia and inflammation by [illegible] at a dose of [illegible] mg/kg. R1 [illegible] also inhibited active [illegible]

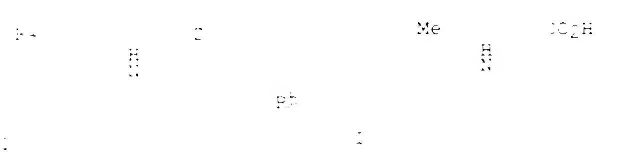
[illegible] lung inflammation in mice dosed orally at [illegible] and [illegible] suppressing BAL eosinophilia by [illegible]. Thus, I are potent MRP inhibitors that are useful in the prevention and treatment of asthma.

[illegible] ANSWER [illegible] OF [illegible] HCAPLUS COPYRIGHT [illegible] ACS
AN [illegible] HCAPLUS
[illegible]
TI Preparation of [illegible]-4-bromo or 4-iodo phenylamino [illegible] acid derivatives as MEK inhibitors
IN [illegible]
PA Warner-Lambert Company, USA
SO PCT Int. Appl., [illegible] pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	A1	[illegible]	WO 1999-US[illegible]	1999[illegible]

W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRAI US 1998-113291 P 19981222
US 1999-164755 P 19991110
OS MARPAT 133:58616
GI



I II

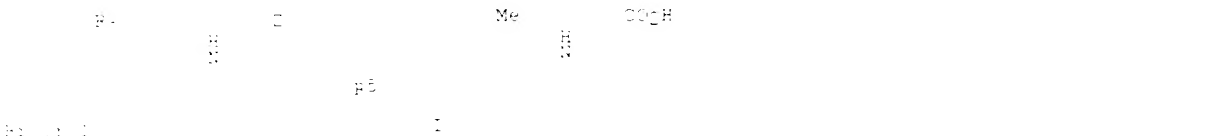
AB The title compds. (I) [wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, or CN; R3-R5 = independently H, OH, halo, CF3, alkyl, alkoxy, NO2, CN, or [illegible] or NH(m-(CH2)n-R9, where R9 = H, OH, CO2H, or NR10R11; m = 0 or 1; n = [illegible]-4; R10 and R11 = H, alkyl, or taken together with the N to which they are attached form a 3-10 membered ring; Z = CO2R7, tetrazolyl, CONR6R7, CONHNR10R11, or CH2OR7; R6 and R7 = independently H, (cyclo)alkyl, alkenyl, alkynyl, acyl, (hetero)aryl, or taken together with the N to which they are attached form a 3-10 membered ring, etc.] were prepd. by std. or **combinatorial** synthetic methods involving the addn. of halobenzoic acids to haloanilines and optional redn. or amidation of the acid. Thus, treatment of 2-amino-5-iodotoluene in THF with LDA in THF/heptane/ethenylbenzene soln., followed by addn. of 2,4-difluorobenzoic acid in THF afforded II. Combination chemotherapy of I with a known mitotic agent caused dramatic increases of apoptosis of colon and lung carcinoma cells. For instance, 2-(2-chloro-4-iodophenylamino)-N-cyclopropylmethoxy-3,4-difluorobenzamide (PD 184352) in combination with paclitaxel resulted in 44 to 55% apoptosis, [illegible] increases over using either agent alone, of colon 26 carcinoma, HT-29 colon carcinoma, and A549 lung carcinoma cells.
RE.CNT [illegible]
RE
[illegible] AS; WO [illegible] A 1997 HCAPLUS
[illegible] US [illegible] A 1999 HCAPLUS
[illegible]; BRITISH JOURNAL OF CANCER 1997, V75 [illegible] HCAPLUS
[illegible] A 1999 HCAPLUS

... BL ... WITH A DIFFERENTIATI ... ...
... ILS ... AVAILABLE IN THE FILE ...

... ANSWER ... OF ... AVAILABLE ... COPYRIGHT ... ACS
AN ... ...
TI ... ... 4-... ... 4-... ...
... MMP Inhibitors
IN ... Lang, Daniel A.; Macus, Penny; Reid Mason, Andrew; Allen, Alan P ...
PA ... Ltd., Australia
SO ... Int. Appl., ... pp.
... CODEN: PIXXD2
DT ... Patent
LA ... English
FAN.CNT ...

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
...	...	...	...	...
PI ...	A2	...	WO ...	...
	W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CR, CU, CZ, DM, EE, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, UG, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
...	...	...	...	...
...	...	...	...	...

PRAI ...
... MARPAT ...



AB The title compds. [I; (wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, ... CN; R2-R5 = independently H, OH, halo, CF3, alkyl, alkoxy, NO2, CN, ... or NR9 m- CH2)n-R9, where R9 = H, OH, CO2H, or NR10R11; m = 0 or 1; n = ...-4; R10 and R11 = H, alkyl, or taken together with the N to which they are attached form a 3-10 membered ring; Z = SO2R7, tetrazolyl, CONR6R7, C(NHNR10R11, or CHOR7; R6 and R7 = independently H, cyclo alkyl, alkenyl, alkynyl, acyl, hetero aryl, or taken together with the N to which they are attached form a 3-10 membered ring, etc.] were prepd. by stds. or **combinatorial** synthetic methods involving the addn. of halobenzoic acids to haloanilines and optional redn. or amidation of the acid. For example, treatment of 2-amino-5-iodotoluene in THF with LDA in THF heptane/ethenylbenzene soln., followed by addn. of 2,4-difluorobenzoic acid in THF afforded II. In assays against type II collagen induced arthritis in mice and monoarticular arthritis in rats, I showed potent anti-arthritic activity. I inhibited IL-1 induced stromelysin prodn. in rabbit synovial fibroblast cell cultures with IC50 from ... nM to ... uM. Interleukin 1-alpha stimulated cartilage degrad. was reduced by ... in New Zealand white rabbits upon administration of I. Thus, I are potent MMP inhibitors useful in the prevention and treatment of rheumatoid arthritis or osteoarthritis.

L... ANSWER ... OF ... HCAPLUS COPYRIGHT ... ACS
AN ...
TI ... 4-... 4-... phenylamino ... MMP ...
... MMP Inhibitors
IN ... Daniel A.; Marcus Penny; Reid Mason, Andrew; Allen, Alan P ...
PA ... Australia-Limited Company, USA

PATENT NO. KIND DATE APPLICATION NO. DATE
WO AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KG, KP, KR, KZ, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI

AB The title compds. I [wherein R1 = H, OH, alkyl, alkoxy, halo, CF3, etc.; R2-R5 = independently H, OH, halo, CF3, alkyl, alkoxy, NO2, CN, etc.; A = NH or CH2; n = 0-4; R10 and R11 = H, alkyl, or taken together with the N to which they are attached form a 3-10 membered ring; B = CO2R7, tetrazolyl, CONR6R7, CONHSO2R11, or CH2OR7; R6 and R7 = independently H, cycloalkyl, alkenyl, alkynyl, acyl, heteroaryl, or taken together with the N to which they are attached form a 3-10 membered ring, etc.] were prepd. by solid- or solution-phase combinatorial synthetic methods involving the addn. of substituted acids to haloanilines and optional reaction or amidation of the resulting acids. For example, treatment of 2-amino-5-iodotoluene in THF with LDA in THF heptane/ethenylbenzene soln., followed by addn. of 2,4-difluorophenoxyacetic acid in THF afforded II. In a mixed lymphocyte or leukocyte reaction (MLR) assay, 2-[2-chloro-4-iodophenylamino]-N-cyclopropylmethoxy-3,4-difluorobenzamide (PD 184352) improved histocompatibility and gave IC50 of 1.7 nM. PD 184352 demonstrated potent immunosuppressive activity by causing almost total inhibition of Con A induced T cell proliferation at the highest dose tested (10.0 .mu.M) with IC50 of 340 nM. Thus, I are potent MEK inhibitors with immunosuppressive properties that are useful for preventing and controlling the rejection of transplants in mammals.

RE.CNT 6
RE
(1) Bridges, A; WO 9837881 A 1998 HCAPLUS
(2) Doherty, A; WO 9901421 A 1999 HCAPLUS
(3) Doherty, A; WO 9901426 A 1999 HCAPLUS
(4) Gen Hospital Corp; WO 9934794 A 1999 HCAPLUS
(5) Manna, S; JOURNAL OF IMMUNOLOGY 1999, V163 (4), P1973 HCAPLUS
(6) No Citations Available in the RE Format

L4 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2001 ACS
AN 1999:[illegible] HCAPLUS
DN 131:[illegible]
TI **Combinatorial** de novo synthesis of catalysts: new route to a multifunctional scaffold for activity?
AU Brummer, Albrecht; Riedl, Rainer
CS Institut fuer Organische Chemie, Universitaet zu Koeln, [illegible]

[illegible] combinatorial [illegible]

[illegible] combinatorial library [illegible]

[illegible] combinatorial library [illegible]

[illegible]

Braunwalder, P; Angew Chem Int Ed Engl 1994, V33, P1634 HCAPLUS
Brunsveld, A; Angew Chem Int Ed 1999, V38, P1757 HCAPLUS
Lam, B; Angew Chem Int Ed Engl 1994, V33, P1629 HCAPLUS
Lerner, R; Tetrahedron Lett 1994, V35, P9105 HCAPLUS
Nicolaou, K; Angew Chem Int Ed 1999, V38, P2447 HCAPLUS

ALL [illegible] NO AVAILABLE IN THE RE FORMAT

L14 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2001 ACS

AN [illegible] HCAPLUS

DN [illegible]

TI **Combinatorial library** synthesis of non-nucleotide
oligophosphorus ester oligomers as antithrombotics

IN [illegible], Robert Gerard; Cook, Alan F.; Rudolph, Morris Jonathan; Patel,
[illegible]

PA [illegible] Corporation, USA

SO [illegible], 41 pp., Cont.-in-part of U.S. Ser. No. 874,041.
CODEN: [illegible]

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	[illegible]	A	19991228	US 1998-[illegible]	19980211
	[illegible]	A	19991004	US 1998-[illegible]	19980114
	[illegible]	AA	19980625	CA 1996-[illegible]	19961213
	[illegible]	A1	19970807	WO 1997-US1067	19970122
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU [illegible]	A1	19970822	AU 1997-17531	19970122
	EP [illegible]	A1	19981202	EP 1997-903585	19970122
	R: AT, BE, CH, DE, DK, ES, FR, GB, GP, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP [illegible]	T2	20000530	JP 1997-527718	19970122
PRAI	US 1996-[illegible]		19960118		
	US 1996-595264		19960201		
	WO 1997-US1067		19970122		

RE

* STRUCTURE DIAGRAM IS NOT AVAILABLE FOR DISPLAY * AVAILABLE VIA OFFLINE PRINT *

GI A polymer having structure I wherein A can be the same or different at each monomeric unit and each is independently selected from the group consisting of H, F, lower alkyl, alkyl- or aryl-substituted amino and aminoalkyl; B1 and B2 can be the same or different and are each independently selected from H, lower alkyl, a labeling group, a protecting group, a chromophore, a phosphate-containing group, a peptide at the 5' or 3' end of each monomeric unit, and at least one of the B1 or B2 moieties in each monomeric unit; and Z1 is independently selected from the group consisting of a condensation product of I and a non-natural

diol attached to the N atom of a hydrophilic functionality; ...
... ester is selected from an ether, a guanine or pyrimidine substituted ...
diol is substituted heterocycle; ... a N-Y-thiol
diol attached to a hydrophilic functionality is a thiol.
diol attached to an aliph. or alicyclic hydrophilic functionality
... a **diol** attached to a thio substituted aromatic functionality
... ... a diol has been oxidized attached to a N-Y-thiol or alcohol.
diol, any of which can further include a detectable label, and a
... of ... e.g. preferred R1 moieties include a biomonomer or pharmacophore
... used **diols**, alicyclic **diols**, and glycols.
diols. Also the monomeric building moieties.
combinatorial library mixts. The diversomers and the
... of the libraries as selective target-binding ligands. The invention is
an example of a simple tetrameric prostaglandin which was synthesized as
... diversomeric **library** selection against IL-4 and IFN-gamma.
Targets is reported.

RE.CNT ...
RE

... (1) W. Alberts 1994, HCAPLUS

L... ANSWER 1 OF ... HCAPLUS COPYRIGHT 2001 ACS
AN ... HCAPLUS
TI ... alkylation
... Solid phase preparation of amines
IN ... Ellman, Jonathan; Hetrumbadz, Anders Dejdal
PA ... Warner-Lambert Company, USA
SO ... Pat., 35 pp.
... DENT: USXXAM
DT ... Patent
LA ... English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5...95...	A	19990105	US 1997-965567	19971106
	US 5...2...	A	19990803	US 1998-188042	19981106
PRAI	US 1997-965567		19971106		

...

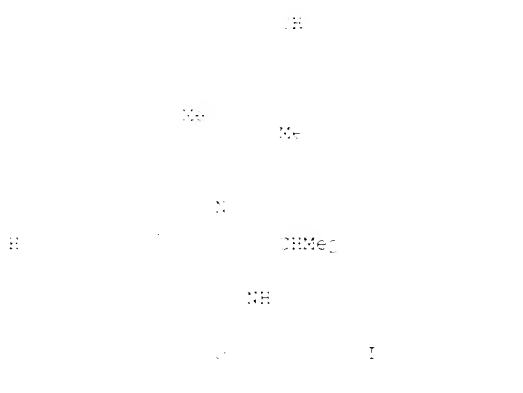
AB In the solid phase prepn. of an amine a **diol** is monoalkylated with a chloromethyl resin followed by reaction with N,N'-carbonyldiimidazole to afford a resin-bound tertiary-alkoxycarbonylimidazole which is N-alkylated and then sequentially treated with appropriate building blocks and reagents to afford a resin-bound amine which affords the desired amine after treatment with an acid. Thus, HO(CH2)2CH(OMe)2OH was linked to **Merrifield** resin and treated with carbonyldiimidazole to give the resin-bound alkoxycarbonylimidazole which was treated with L-leucine Me ester hydrochloride to give resin-bound HO(CH2)2CH(OMe)2OCO-L-Leu-OMe. The methylester was converted to the hydrazide, treated with PhCH2NCS and cleaved from the resin with TFA to give the triazole I.

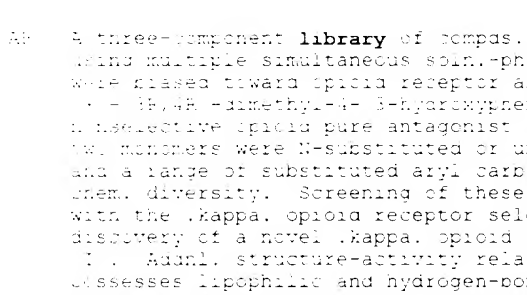
RE.CNT ...
RE

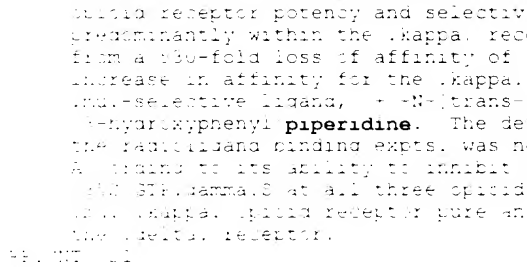
... (1) Brenner; US 5...6147 1995, HCAPLUS
... (2) Fitch; US 5...5356 1997, HCAPLUS
... (3) Hamlin; US 5...2263 1994
... (4) Wang, S; J Am Chem Soc 1976, 98(14), 3701-3, Index HCAPLUS
... (5) Yang; Tetrahedron Lett 1995, 36(4), 547-50, Index HCAPLUS

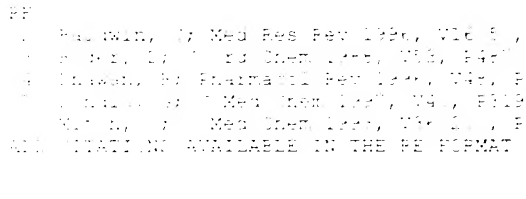
L... ANSWER ... OF ... HCAPLUS COPYRIGHT 2001 ACS
AN ...:...1...4 HCAPLUS
DN ... 1...

... Identification of a .kappa. opioid receptor antagonist from a three-component combinatorial mixture library
... Marchel, Jeffrey S.; Burks, Matthew F.; Ferguson, Dana M.; Portoghese, Philip S.; Haaseth, Richard C.; Weber, Arthur E.; Mattson, Ronald J.; Gray, Gregory A.; Sayre, Lawrence M.
... Department of Medicinal Chemistry and Pharmacognosy, College of Pharmacy, University of Illinois at Chicago, Chicago, IL, 60612-7231, USA
... Journal of Medicinal Chemistry (1997), 40(7), 1097-1104
... CODEN: JMCMAR; ISSN: 0022-2623
... American Chemical Society
... Journal
... English









AB A three-component **library** of compds. was prepd. in parallel using multiple simultaneous soln.-phase synthetic methodol. The compds. were biased toward opioid receptor antagonist activity by incorporating (+)-(3R,4R)-dimethyl-4-(3-hydroxyphenyl) **piperidine** (a potent, nonselective opioid pure antagonist) as one of the monomers. The other two monomers were N-substituted or unsubstituted Boc-protected amino acids and a range of substituted aryl carboxylic acids and were selected to add chem. diversity. Screening of these compds. in competitive binding expts. with the .kappa. opioid receptor selective ligand [3H]U69,593 led to the discovery of a novel .kappa. opioid receptor selective ligand, RTI-5989-23 (I). Addnl. structure-activity relationship studies suggested that I possesses lipophilic and hydrogen-bonding sites that are important to its opioid receptor potency and selectivity. These sites appear to exist predominantly within the .kappa. receptor since the selectivity arises from a 100-fold loss of affinity of I for the .mu. receptor and an 18-fold increase in affinity for the .kappa. receptor relative to the .mu.-selective ligand, (+)-N-[(trans-4-phenyl-2-butenyl)]-(3R,4R)-dimethyl-4-(3-hydroxyphenyl) **piperidine**. The degree of selectivity obsd. in the radioligand binding expts. was not obsd. in the functional assay. A correlation of its ability to inhibit agonist stimulated binding of [35S]GTP.gamma.S at all three opioid receptors, I behaves as a highly .kappa. opioid receptor pure antagonist with negligible affinity for the .delta. receptor.

RE.CNT ...
RE

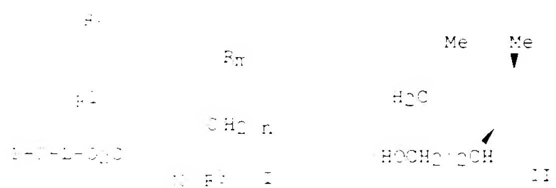
... Portoghese, P; Med Res Rev (1992), V12(2), P199 HCAPLUS
... Portoghese, P; J Med Chem (1988), V31(2), P281 HCAPLUS
... Portoghese, P; Pharmacol Rev (1989), V41(2), P143 HCAPLUS
... Portoghese, P; J Med Chem (1990), V33(1), P547 HCAPLUS
... Portoghese, P; J Med Chem (1992), V35(24), P4619 HCAPLUS

... THERE ARE ... CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 20 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:[illegible] HCAPLUS
DN 127:[illegible]
TI Solid-phase synthesis of cycloalkane derivatives
IN [illegible], Adrian; Tietze, Lutz F.
PA BASF A.-G., Germany
SO Ger. Offen., [illegible] pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE [illegible]	A1	1997[illegible]	DE 1996-1961[illegible]	1996[illegible]
CA [illegible]	AA	1997[illegible]	CA 1997-[illegible]	1997[illegible]
WO [illegible]	A1	1997[illegible]	WO 1997-EP1127	1997[illegible]
W: AU, BG, BR, CA, CN, CZ, GE, HU, IL, JP, KR, LV, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU [illegible]	A1	1997[illegible]	AU 1997-[illegible]	1997[illegible]
AU [illegible]	B2	1999[illegible]		
EP [illegible]	A1	1999[illegible]	EP 1997-[illegible]	1997[illegible]
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE, FI				
CN [illegible]	A	1999[illegible]	CN 1997-[illegible]	1997[illegible]
JP [illegible]	T2	2000[illegible]	JP 1997-[illegible]	1997[illegible]
NO [illegible]	A	1998[illegible]914	NO 1998-4227	1998[illegible]914
PRAI DE 1996-19610103	A	19960315		
WO 1997-EP1127	W	19970306		

OS CASREACT 127:248054; MARPAT 127:248259
GI



AB A procedure for the solid-phase synthesis of cycloalkane derivs. I [P = solid phase support; L = (CH2)1-12, CH2(OCH2)1-150; R1 = H, organic radical; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl; R1R2 = cycloalkene; R3 = substituted alkyl, cycloalkyl, aryl; R = one or two vicinal organic radicals; n = 0 - 4; m = 0 - (n+2)] involving condensation of P-O-L-O2CCH2CO2R3 with R2CH2CR1:CHCHRmCHRm(CH2)nCHO followed by cyclization of P-O-L-O2CC(CO2R3):CH(CH2)nCHRmCHRmCH:CR1CH2R2 in the presence of a Lewis acid is described. Thus, iridoid precursor II was prepd. from P-O-L-O2CCH2CO2Me via condensation with Me2C:CHCHMeCH2CH2CHO in CH2Cl2 contg. **piperidinium** acetate followed by cyclization in CH2Cl2 contg. InBr3 and redn. with DIBAH in PhMe.

L4 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:[illegible] HCAPLUS
DN 127:[illegible]
TI Preparation of non-nucleotide phosphorus ester oligomers and their **combinatorial libraries** as selective target-binding compounds
IN Hentles, Robert G.; Cook, Alan F.; Rudolph, Morris J.; [illegible]
PA Pharmagenics, Inc., USA
SO PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]

W: AU, BA, BB

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

[illegible]	[illegible]	A	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	A1	[illegible]	AU [illegible]	[illegible]
[illegible]	[illegible]	A1	[illegible]	EP [illegible]	[illegible]

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

[illegible]	[illegible]	A	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	AA	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	B1	[illegible]		
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

[illegible]	[illegible]	A	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	AA	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	B1	[illegible]		
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]

PI: AT, BE, CH, DE, DK, ES, FI, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG

[illegible]	[illegible]	TD	[illegible]	JP [illegible]	[illegible]

AB A homo- or hetero-oligomer is claimed having two monomeric units represented by A1(B1)nB2, A is same or different in each monomeric unit, independently selected from O, S, lower alkyl, an N-substituted alkylamino, an N-substituted arylamino and aminoalkyl; B1 and B2 = same or different, independently selected from H, lower alkyl, a labeling group, a protecting group, a phosphoramidate or a phospho-monoester; B1 can be the same or different in each monomeric unit, and in at least one of the non-nucleotide monomeric units, B1 is independently selected from a (i) condensation product of a non-vicinal **diol** attached to an H-bond donor functionality; (ii) an H-bond acceptor selected from an ether, a purine or pyrimidine substituted 1,2-**diol** or a N-substituted heterocycle; (iii) a non-vicinal **diol** attached to a hydrophobic functionality or a vicinal **diol** attached to an aryl or alicyclic hydrophobic functionality; (iv) a **diol** attached to a ring substituted anionic functionality and (v) a cationic moiety attached to a non-vicinal or alicyclic **diol**, any of which may further include a detectable label; n = 1-3. Preferred B1 moieties include condensation products of heterocyclic **diols**, alicyclic **diols**, and polycyclic **diols**. The non-nucleotide monomers thereof, **combinatorial library** mixts. of the oligomers and the use of the oligomers as selective target-binding compds. are claimed. In an example, when a **library** of non-nucleotide phosphorus ester oligomers is screened against thrombin, a subpopulation (0.001-0.01%) of the original **library** binds to the target, with an apparent Kd = 100-500 nM.

L14 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2001 ACS

AN [illegible] HCAPLUS

TI [illegible]

TI Solid-phase preparation of encoded **combinatorial** dipeptide hydroxypropylamine **libraries**

IN Baldwin, John J.; Henderson, Ian; Waksmunski, Frank S.

PA Pharmacopeia, Inc., USA

SO PCT Int. Appl., 86 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

PI WO 9737315 A1 19971009 WO 1997-US1018 19970123

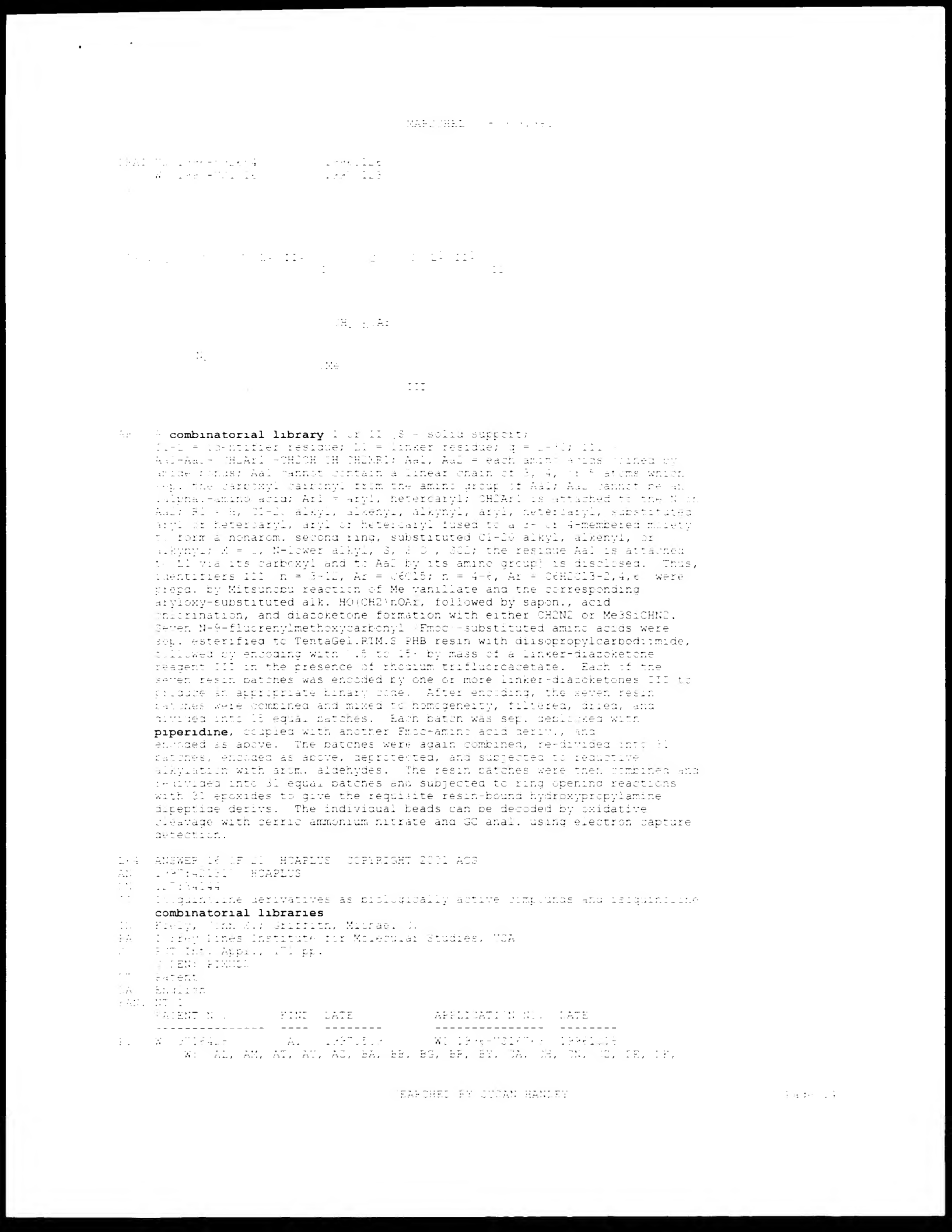
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

[illegible]	[illegible]	A	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	AA	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	B1	[illegible]		
[illegible]	[illegible]	A1	[illegible]	[illegible]	[illegible]

PI: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

[illegible]	[illegible]	TD	[illegible]	JP [illegible]	[illegible]



A combinatorial library I or II (S = solid support; L = spacer/linker residue; Ll = linker residue; q = 0-10; Ll = Aa1-Aa2- CHArCH(OH)CH2NR; Aa1, Aa2 = each amino acids joined by amide linkus; Aa1 cannot contain a linear chain of 3, 4, or 5 atoms which sep. the carboxyl carbonyl from the amino group of Aa1; Aa2 cannot be an alpha.-amino acid; Ar1 = aryl, heteroaryl; CH2Ar1 is attached to the N of Aa2; R1 = H, C1-20 alkyl, alkenyl, alkynyl, aryl, heteroaryl, substituted aryl or heteroaryl, aryl or heteroaryl fused to a 5- or 6-membered moiety to form a nonarom. second ring, substituted C1-20 alkyl, alkenyl, or alkynyl; X = O, N-lower alkyl, S, SO, SO2; the residue Aa1 is attached to Ll via its carboxyl and to Aa2 by its amino group) is disclosed. Thus, thientipliers III (n = 3-12, Ar = C6H5; n = 4-6, Ar = C6H3O3-2,4,6) were prepd. by Mitsunobu reaction of Me vanillate and the corresponding aryloxy-substituted alk. HO(CH2)nOAr, followed by sapon., acid chlorination, and diazoketone formation with either CH2N2 or Me3SiCHN2. Seven N-9-fluorenylmethoxycarbonyl (Fmoc)-substituted amino acids were sep. esterified to TentaGel.PTM.S PHB resin with diisopropylcarbodiimide, followed by encoding with 0.5 to 15% by mass of a linker-diazoketone reagent III in the presence of rhodium trifluoroacetate. Each of the seven resin batches was encoded by one or more linker-diazoketones III to produce an appropriate binary code. After encoding, the seven resin batches were combined and mixed to homogeneity, filtered, dried, and divided into 15 equal batches. Each batch was sep. deblocked with **piperidine**, coupled with another Fmoc-amino acid deriv., and encoded as above. The batches were again combined, re-divided into 31 batches, encoded as above, deprotected, and subjected to reductive alkylation with arom. aldehydes. The resin batches were then combined and re-divided into 31 equal batches and subjected to ring opening reactions with 31 epoxides to give the requisite resin-bound hydroxypropylamine dipeptide derivs. The individual beads can be decoded by oxidative cleavage with cerric ammonium nitrate and GC anal. using electron capture detection.

L14 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2001 ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Isoquinoline derivatives as biologically active compounds and isoquinoline **combinatorial libraries**
IN Kerr, John G.; Griffith, Marcus J.
PA Torrey Pines Institute for Molecular Studies, USA
SO PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
[illegible]	A1	[illegible]	WO [illegible]	[illegible]

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK,

MARPAT [illegible]

AE, AG, AL, AM, AO, AR, AT, AU, AZ, BA, BB, BG, BH, BJ, BN, BR, BW, BY, BZ, CA, CF, CG, CH, CI, CL, CM, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GN, GQ, GR, GT, GW, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MC, MD, MG, MK, MN, MW, MX, MZ, NA, NE, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

AP [illegible] AA [illegible] AU [illegible]

AT [illegible] BA [illegible]

AT [illegible] BE [illegible]

BF, BJ, BR, CA, CF, CG, CH, CI, CM, DE, DK, ES, FI, FR, GA, GB, GN, GQ, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

AP [illegible] AU [illegible] IN [illegible]

AT [illegible] BA [illegible] CF [illegible]

IPAI [illegible]

AP [illegible]

MARPAT [illegible] MARPAT [illegible]

AB Is quinoline derivs. I [R1 = un substituted alkyl, alkenyl, etc.; R2 - H, un substituted alkyl, etc.; R3 - R6 = H, halo, etc.; X = H, etc., Y = NLH, etc.] are prepd. More specifically, this invention provides novel isoquinolines as well as novel **libraries** comprised of many such compds. This document also describes an initial screen of isoquinoline **libraries** in the .delta.-opioid receptor assay and the .sigma. receptor assay.

L14 ANSWER [illegible] HCAPLUS COPYRIGHT 2001 ACS

AN [illegible] HCAPLUS

DN [illegible]

TI A solution-phase strategy for the synthesis of chemical **libraries** containing small organic molecules: a universal and dipeptide mimetic template

AU Cheng, Joan; Tarby, Christine M.; Comer, Daniel D.; Williams, John P.; Caporale, Lynn H.; Myers, Peter L.; Boger, Dale L.

CS ChemRx, Inc., San Diego, CA, 92121, USA

SO Bioorg. Med. Chem. 1996, 4(5), 727-737

CODEN: BMECEP; ISSN: 0968-0896

DT Journal

LA English

[illegible]

AB A general approach to the solution-phase, parallel synthesis of chem. **libraries**, which allows the prepn. of multi-milligram quantities of each individual member, is exemplified with both a universal template I and a dipeptide mimetic template II. In each step of the sequence, the

[illegible] starting material, reagents and their [illegible] simple [illegible] to obtain the desired intermediates and final compds. in high purities [illegible] independent of the reaction yields and without [illegible] purification. Thus, [illegible] of I with [illegible] amine, [illegible] nucleophile R1NH, followed by further [illegible] with [illegible] amines, [illegible] R2NH, [illegible], and acylation with R3COCH gives
combinatorial libraries [illegible].
Combinatorial libraries are made with II using similar [illegible].

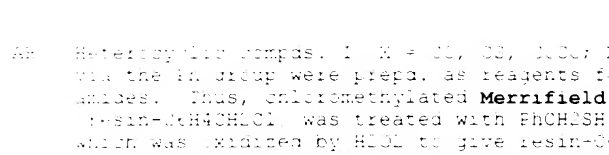
L4 ANSWER 1[illegible] OF [illegible] HCAPLUS COPYRIGHT 2001 ACS
AN [illegible] HCAPLUS
DN [illegible]
TI Solid phase polyamine linkers - their utility in synthesis and the preparation of directed **libraries** against trypanothione reductase
AU Marsh, Ian R.; Smith, Helen; Bradley, Mark
CS Dep. Chemistry, Southampton Univ., Highfield, Southampton, [illegible] UK
SO Chem. Commun. (Cambridge) (199[illegible]), [illegible], [illegible]41-[illegible]42
CODEN: CHCOFS; ISSN: 1359-7345
DT Journal
LA English
AB A variety of di-protected polyamines were anchored to a solid support and used in solid phase chem. and **library** generation of trypanothione reductase inhibitors.

L4 ANSWER 19 OF [illegible] HCAPLUS COPYRIGHT 2001 ACS
AN 199[illegible]:698534 HCAPLUS
DN 123:340[illegible]
TI Rapid optimization of organic reactions on solid phase using the multipin approach: synthesis of 4-aminoproline analogs by reductive amination
AU Bray, Andrew M.; Chiefari, Debra S.; Valerio, Robert M.; Maeji, N. Joe
CS Chiron Mimotopes Pty. Ltd., Clayton, 3168, Australia
SO Tetrahedron Lett. (1995), 36(28), 5081-4
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
OS CASREACT 123:340797
AB The multipin method of multiple solid phase synthesis was used in conjunction with **high throughput** characterization methods (ion spray mass spectrometry and HPLC) to optimize reactions rapidly for solid phase synthesis. The approach is demonstrated in the synthesis of 4-aminoproline analogs by reductive amination under a wide range of conditions, using a diverse set of amines.

L4 ANSWER 2[illegible] OF [illegible] HCAPLUS COPYRIGHT 2001 ACS
AN [illegible] HCAPLUS
DN [illegible]:218[illegible]
TI Polymeric activated esters of 3,4-**dihydroxy**-2,5-diphenylthiophene 1,1-di-oxide
IN Steglich, Wolfgang; Hollitzer, Oswald; Seewald, Alfred
PA BASF A.-G., Fed. Rep. Ger.
SO Can., [illegible] pp. Division of Can. Appl. No. 2[illegible]9,418.
CODEN: CAXXA4
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	--------------	----	--------	--------------	--------
PI	CA 1110365	A2	19811006	CA 1981-359158	198[illegible]
	DE 2625539	A1	19771222	DE 1976-2625539	1976[illegible]
	DE 2625539	C[illegible]	19[illegible]		
	CA 111[illegible]	A1	19[illegible]	CA 1977-[illegible]	1977[illegible]
PRAI	DE 1976-2625539		1976[illegible]		
	CA 1977-[illegible]418		1977[illegible]		

[illegible]



AB Heterocyclic compds. I [X = O, S, CH2; X1 = O, S] bound to polymers via the X group were prepd. as reagents for the synthesis of peptides and amides. Thus, chloromethylated **Merrifield** resin [resin-C6H4CH2Cl] was treated with PhCH2SH to give resin-C6H4CH2SCH2Ph, which was oxidized by HClO to give resin-C6H4CH2SO2CH2Ph, which was cyclized with CH2(CO2Et)2 in EtOH contg. Na to give thiophene II [R = resin, R1 = H], which was esterified with COCl2 to give cyclic carbonate III [R = resin] [IV]. IV was treated with Z-Val-OH [Z = PhCH2OCO] to give active ester II [R = resin, R1 = Z-Val], which was coupled with H-Val-OMe to give Z-Val-Val-OMe. II [R = R1 = H] was esterified with COCl2 to give III [R = H], which was treated with N-protected amino acids, e.g. MeO2CCH2CO-Pro-OH, to give the corresponding active esters, e.g. II [R = H, R1 = MeO2CCH2CO-Pro]. The latter active esters were used in a series of peptide couplings in soln.